United States Court of Appeals

for the Second Circuit

APPELLANT'S APPENDIX

ORIGINAL

Pls

UNITED STATES COURT OF APPEALS

FOR THE SECOND CIRCUIT

74-2155

NEIL KAMERLING, RICHARD CANTELLO, EDWARD MORAN, JAMES J. SEABARKROB, and JOSEPH J. ANASTASIO,

Plaintiffs-Appellants,

-against-

JOHN T. O'HAGAN, Fire Commissioner, City of New York,

Defendant-Appellee.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF NEW YORK

APPELLANTS' APPENDIX

MEYER & WEXLER
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UNITED STATES COURT OF APPEALS
FILED
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A. DANIEL FUSARO, CLERK

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SUMMONS

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

NEIL KAMERLING, RICHARD CANTELLO, EDWARD MORAN, JAMES J. SEABARKROB, HARRY F. ROWE,

Plaintiffs,

-against-

JAMES T. O'HAGAN, Fire Commissioner, City of New York,

Defendant.

TO THE ABOVE NAMED DEFENDANT:

YOU ARE HEREBY SUMMONED AND REQUIRED to serve upon MEYER & WEXLER, ESQS., attorneys for the plaintiffs, whose address is 28 Manor Road, Smithtown, New York, an Answer to the Complaint which is herewith served upon you, within twenty (20) days after service of the summons upon you, exclusive of the day of service. If you fail to do so, judgment by default will be taken against you for the relief demanded in the Complaint.

s/_____
Clerk of the U. S. District Court
Eastern District, New York

Dated: Smithtown, New York
July 17, 1974

COMPLAINT

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

[SAME TITLE]

I - JURISDICTION

1. The jurisdiction of this Court is found upon the existence of a Federal question.

2. This action arises under the First and Fourteenth Amendments to the Constitution of the United States. This is an action for a declaratory judgment and permanent injunction to prevent the further depravation of the plaintiffs constitutional rights of free expression, due process and equal protection as provided for in the First and Fourteenth Amendments to the Constitution of the United States.

II - PARTIES

3. The plaintiffs are employees of the City of New York, members of the New York City Fire Department, all reside in the State of New York and in the Counties of Queens, Suffolk, Nassau, Richmond, and Putnam.

4. The defendant is the Fire Commissioner

of the City of New York, a municipal corporation, charged with the responsibility of providing fire protection for the residents of the City of New York.

III - INCIDENTS AT ISSUE

5. On July 1, 1974 the defendant issued Regulation PA/ID6-74 which became effective on 7/8/74 and which said Regulation prescribed grooming standards for members of the New York City Fire Department.

6. That said Regulation provides standards for length of hair, sideburns, mustaches and prevents the wearing of beards and goatees. (Annexed hereto, made a part hereof and marked Exhibit "A" is a true and exact copy of said Regulation).

7. That subsequent to the adoption of said Regulation, the defendant adopted disciplinary procedures to be followed in the event of a violation of said Regulation. That said procedures provide for a trial to be held with respect to any member of the Fire Department in violation of said Regulation and the punishment to be imposed with respect to any fireman in violation of said Regulation as of the date of trial being dismissal from the Fire Department

of the City of New York. (Annexed hereto, made a part hereof and marked Exhibit "B" is a true and exact copy of said procedure).

8. That all of the plaintiffs prior to the adoption of the aforementioned Regulation had adopted personal grooming standards which standards were in violation of said Regulation.

IV - CAUSE OF ACTION

9. The aforementioned Regulation regarding the personal grooming standards of members of the New York City Fire Department is a violation of the plaintiffs constitutional rights of free expression, due process, equal protection and personal liberties as provided for in the First and Fourteenth Amendments to the United States Constitution in that said Regulation is arbitrary, capricious, vague and furnishes a substantial restraint upon the plaintiffs aforementioned rights without their being any rational basis for said Regulation and that said Regulation was adopted without a public hearing in violation of the plaintiffs constitutional rights of due process.

10. That the plaintiffs are now suffering

and continue to suffer irreparable injury as a result of the enforcement of the aforementioned Regulation.

11. That the plaintiffs have no plain, adequate or complete remedy at law to redress the violation of their constitutional rights, and this suit for a declaratory judgment and permanent injunction is the only means of securing complete and adequate relief for the plaintiffs.

WHEREFORE, plaintiffs pray that this Court:

(a) Declare the aforementioned Regulation as being illegal, vague and in violation of the plaintiffs constitutional rights and a restriction on the plaintiffs personal freedoms.

(b) Declare that the plaintiffs be permitted to adopt a mode of personal grooming of their choice.

(c) Grant the plaintiffs a permanent injunction, ordering the defendant, his agents, servants and/or employees and all persons in active concert with him from enforcing the aforementioned grooming Regulation.

(d) Order the defendant to remove from the personnel file of each of the plaintiffs any and

all references presently contained therein with respect to the violation of the aforementioned grooming standard.

(e) Grant such other and further relief as to this Court may seem just and proper.

Respectfully submitted,

MEYER & WEXLER, ESQS.

By: s/
Richard T. Haefeli, Esq.
Attorneys for Plaintiffs
Office & P. O. Address
28 Manor Road
Smithtown, New York 11787
(516) 265-4500

EXHIBIT "A" - FIRE DEPARTMENT REGULATION - ANNEXED TO COMPLAINT

14/10a
25

FIRE DEPARTMENT

ISSUE DATE: 7/1/74
EFFECTIVE DATE: 7/8/74
EXPIRATION DATE: INDEFINITE

HEALTH SERVICES PROGRAM

SUBJECT: HEALTH AND SAFETY STANDARDS FOR HAIR AND BEARDS

I. STATEMENT OF POLICY

A) The grooming of individual members of this Department must be consistent with the conditions under which he is employed. Most of our work takes place in highly heated, toxic, poorly illuminated, abnormal and unsanitary conditions. Smoke inhalation, heat prostration, lacerations, burns and falls are common consequences of firefighting. Hair of excessive length on the head, and hair on the face of any length will increase the probabilities of the indispositions mentioned above. With the mask facepiece designs currently in use it has been reliably proven by NASA, the National Bureau of Standards and others that it is impossible to obtain a satisfactory seal on a bearded man.

B) It is evident also that flowing hair is more readily ignited and that hair, excessive to any degree, acts as an insulator, retaining body heat and raising body temperatures at a time when eliminating body heat through exposed skin surface is highly desirable.

C) The health of the individual fireman is also compromised when working in an unsanitary environment. Exposed hair is a breeding place for germs. Lacerations on hair covered surfaces

are subject to infection in direct proportion to the area and depth of the hair thereby complicating the injury and extending recuperation period.

D) Accordingly, safety standards for personal grooming and procedures for implementation are hereby established within the following guidelines. They shall apply to all members capable of performing fire duty.

2. STANDARDS

A) Head hair:

1. Head hair shall be of such length and style as desired but shall be within the following restrictions:
   a. Hair on top of the head shall not be excessive in length at any point,
   b. Hair, except for shingled or cropped areas, shall not protrude below any point along the full band line of the helmet.
   c. Hair at the back of the neck shall be tapered neatly and shall not extend below the shirt collar.

B) Facial hair:

1. Moustaches are permitted, but shall conform to the following:
   a. They must be closely trimmed.
   b. They must not extend beyond the corners of the mouth.
   c. They must not extend below any portion of the upper lip.

2. Beards or goatees are not permitted.

3. All members shall be otherwise freshly shaven when reporting for duty.

C) Sideburns:

1. Sideburns shall be kept neatly trimmed and close to the face to avoid any possibility of a defective mask facepiece seal.

a. They shall not extend below the lower extremity of the ear.

3. PROCEDURES

A) Company officers at roll calls shall inspect members for compliance with these safety standards.

1. When deficiencies are detected, the member violating any of these standards shall be ordered to correct such deficiency. An entry shall be made in the company journal of all the facts, including the exact nature of the violation, and the subsequent date when the member is to be re-inspected for compliance with orders.

2. When in the opinion of the inspecting officer, the member's violation of safety standards might impair the full effectiveness of the mask facepiece, he shall proceed as in the preceding par. 1. Additionally, he shall relieve such a member from mask assignments until the violation is corrected.

3. Interim periods between the time of detection of the safety violation and the date of its reinspection for

orrection shall not exceed two tours of duty, the tour during which the violation was detected plus the following tour.

B) Chief Officers during visits and at fires shall enforce compliance with these procedures. When violations are detected and investigation reveals that subordinate officers have tolerated violation of these standards in their Commands, such officer and the necessary information shall be reported immediately to the Boro Command office for their additional action, as necessary.

BY DIRECTION OF THE FIRE COMMISSIONER

Robert F. Mendes
Deputy Chief of Staff
Personnel Division

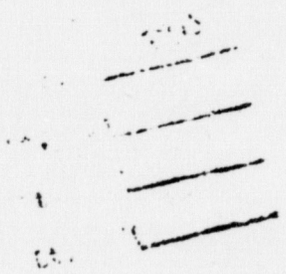


EXHIBIT "B" - DISCIPLINARY PROCEDURE - ANNEXED TO COMPLAINT

The City of New York

FIRE DEPARTMENT

Boro Command, Queens

July 12, 1974

To: 13th, 14th & 16th Divisions

Subject: Health & Safety Standards for Hair and Beards

Any member reporting for duty on and after 0900 hours July 15, 1974, who does not fully comply with the Health and Safety Standards for Hair and Beards shall be subject to the following:

1. Charges shall be preferred and prepared forthwith.
2. Member shall be served with copy of charges on day charges preferred.
3. Notice of trial given to member immediately.
4. Suspended from duty forthwith. The deputy chief shall notify the boro commander (9x5) or the staff officer on night duty, who shall forthwith suspend the member from duty, and notify the fire commissioner.
5. Trial scheduled for ten (10) days after date of suspension.
6. No postponements of trial date to be granted as this involves health and safety of members.
7. Only one witness required, usually Officer preparing charges.

Trials will be held at Pier A., North River seven days a week beginning at 0930 hours. The following sentences will be imposed:

1. a) If a member is found guilty after trial, and has complied with the safety standards by date of trial, he will be subject to a fine of up to ten days pay.

   b) If member complies with safety standards before appearing for trial his suspension may be lifted by the deputy chief after consultation with the proper boro officer or staff officer.

EXHIBIT "B" - DISCIPLINARY PROCEDURE -
ANNEXED TO COMPLAINT

The City of New York

FIRE DEPARTMENT

2. If member is found guilty after trial and has not complied with the Safety Standards by date of trial he will be dismissed from the department.

Edward [illegible]
Assistant Chief
Queens Boro Commander

ORDER TO SHOW CAUSE
DATED JULY 17, 1974

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

[SAME TITLE]

Upon reading and filing the Summons and Complaint and the annexed affidavits of NEIL KAMERLING, RICHARD CANTELLO, EDWARD MORAN, JAMES J. SEABARKROB, HARRY F. ROWE, and RICHARD T. HAEFELI, ESQ., duly sworn to on the 17th day of July, 1974, and the exhibits attached thereto, it is

ORDERED, that JOHN T. O'HAGAN, Fire Commissioner of the City of New York, show cause at this Court to be held at Courtroom #1, United States Courthouse, 225 Cadman Plaza East, Brooklyn, New York, on the 23rd day of July, 1974, at 10:00 in the forenoon of that day or as soon thereafter as counsel can be heard why an Order should not be made pursuant to Rule 65 of the Federal Rules of Civil Procedure, enjoining JOHN T. O'HAGAN, Fire Commissioner of the City of New York from enforcing regulation PA/ID6-74 effective dated 7/1/74 establishing grooming standards for members of the New York City Fire Department and for a further Order enjoining said defendant from

initiating any action against the plaintiffs for violation of said regulation pending the outcome of a trial of the issues, and it is further

ORDERED, that pending a hearing and determination on this motion, defendant hereby be and hereby is enjoined and restrained from proceeding with any action against the plaintiffs' as a result of any alleged violation of the aforementioned grooming regulation adopted by the defendant, and it is further

ORDERED, that personal service of this Order, the Affidavits and exhibits upon which it is based, and the Summons and Complaint shall be made personally upon JOHN T. O'HAGAN, Fire Commissioner of the City of New York, or his duly authorized representative on or before the 18th day of July, 1974, and that said service shall be deemed sufficient.

Dated: Brooklyn, New York
July 17, 1974.
4:20 P.M.

E N T E R:

s/ Mark A. Costantino
U.S. District Judge

AFFIDAVIT OF NEIL KAMERLING
IN SUPPORT OF ORDER TO SHOW CAUSE

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

[SAME TITLE]

STATE OF NEW YORK)
) SS.:
COUNTY OF QUEENS)

NEIL KAMERLING, being duly sworn, deposes and says:

1. That your deponent resides at 175-20 Wexford Terrace, Jamaica, New York.

2. That your deponent has been a member of the New York City Fire Department and employee of the City of New York for four years, presently working in the South Bronx area which is one of the most active areas in the City of New York.

3. That the defendant is the Fire Commissioner of the City of New York, a municipal corporation.

4. That on July 1st, 1974, the defendant issued regulation PA/ID6-74 effective July 8th, 1974, establishing grooming standards for members of the Fire Department of the City of New York. (Annexed hereto, made a part hereof and marked Exhibit "A" is a true and exact copy of said regulation.)

AFFIDAVIT OF NEIL KAMERLING
IN SUPPORT OF ORDER TO SHOW CAUSE

5. That prior to July 1st, 1974, the grooming standard in effect for the New York City Fire Department only required an individual fireman's hair to be neat and trimmed.

6. That the aforementioned regulation PA/ID6-74 issued July 1st, 1974, by its own terms was based upon the following:

(a) It is impossible to obtain a satisfactory seal with a face mask on a bearded man.

(b) Flowing hair is more readily ignited and hair excessive to any degree, acts as an insulator.

(c) Exposed hair is a breeding place for germs, and that lacerations occurring on hair covered surfaces subject said injury to infection and complicate the injury and extend the time for recuperation from said injury.

7. That said regulation states in part:

(a) Hair on top of the head shall not be excessive in length at any point and that hair at the back of the neck shall not extend below the shirt collar.

8. That the regulations provide further that an inspecting officer may order a fireman to correct a violation if in such inspecting officers opinion such violation might impair the full effectiveness of the face mask.

9. Subsequent to July 1, 1974, disciplinary proceedings to be followed for a violation of the aforementioned regulation were issued by the defendant and provided for the dismissal of any fireman who failed to comply with the regulation. (Annexed hereto, made a part hereof and marked Exhibit "B" is a true and exact copy of said letter procedure).

10. That your deponent has had hair down to the middle of his back, a full beard three to four inches long, full side burns and mustache for a period of two years prior to July 1, 1974. All of same being in violation of the aforementioned regulation.

11. That during said period your deponent has fought numerous fires, and engaged in numerous other activities which exposed your deponent to extensive heart, flame, smoke, noxious and poisonous

gases, and that in none of said instances did your deponent's hair ignite into flames.

12. That in none of said instances when your deponent was required to put on a face mask to protect himself against smoke, noxious and poisonous gases did your deponent suffer any adverse effects as a result of being exposed to said foreign substances since in each case your deponent obtained a proper seal with the face mask.

13. That in addition, Fire Department Regulations as set forth in Training Bulletin, Mask 1, issued March 19th, 1966, require firemen at the Weekly Muti-Unit drill to put on the face mask and obtain a proper seal. Your deponent has undergone numerous such tests and has always obtained a proper seal and has never failed said test. (Annexed hereto, made a part hereof and marked Exhibit "c" is a true and exact copy of said Bulletin.)

14. That it is your deponent's desire to adopt a grooming standard personal to himself, which said standard would be in violation of the aforementioned regulation issued by the defendant, but

to do so at the present time would subject your deponent to dismissal from his position.

15. That your deponent respectfully submits that the aforementioned regulation and enforcement thereof is a violation of your deponent's personal liberty and constitutional rights as provided for in the First and Fourteenth Amendments to the United States Constitution, in that it imposes a purposeless restraint on your deponent's Constitutional rights, and further that said regulation having been adopted, upon information and belief without a public hearing to establish its necessity violates your deponent's rights to due process.

16. That your deponent simultaneously with this motion is instituting a civil action against the defendant for a declaratory judgment and permanent injunction. (Annexed hereto, made a part hereof and marked Exhibit "D" is a true and exact copy of said Summons and Complaint).

WHEREFORE, your deponent repectfully requests that the within application be in all respects granted.

[Duly sworn to
July 17, 1974]

s/ Neil Kamerling
Neil Kamerling

AFFIDAVIT OF RICHARD CANTELLO
IN SUPPORT OF ORDER TO SHOW CAUSE

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

[SAME TITLE]

STATE OF NEW YORK)
) SS.:
COUNTY OF QUEENS)

RICHARD CANTELLO, being duly sworn, deposes and says:

1. That your deponent resides at 140 Oakland Avenue, Central Islip, New York.

2. That your deponent has been a member of the New York City Fire Department and employee of the City of New York for eleven and one-half (11-1/2) years.

3. That the defendant is the Fire Commissioner of the City of New York, a municipal corporation.

4. That on July 1st, 1974, the defendant issued regulation PA/ID6-74 effective July 8th, 1974, establishing grooming standards for members of the Fire Department of the City of New York. (Annexed hereto, made a part hereof and marked Exhibit "A" is a true and exact copy of said regulation.

AFFIDAVIT OF RICHARD CANTELLO
IN SUPPORT OF ORDER TO SHOW CAUSE

5. That prior to July 1st, 1974, the grooming standard in effect for the New York City Fire Department only required an individual fireman's hair to be neat and trimmed.

6. That the aforementioned regulation PA/ID6-74 issued July 1st, 1974, by its own terms was based upon the following:

(a) It is impossible to obtain a satisfactory seal with a face mask on a bearded man.

(b) Flowing hair is more readily ignited and hair excessive to any degree, acts as an insulator.

(c) Exposed hair is a breeding place for germs, and that lacerations occurring on hair covered surfaces subject said injury to infection and complicate the injury and extend the time for recuperation from said injury.

7. That said regulation states in part:

(a) Hair on top of the head shall not be excessive in length at any point and that hair at the back of the neck shall not extend below the shirt collar.

(b) Mustaches are not permitted to extend beyond the corners of the mouth nor below any portion of the upper lip.

(c) Beards or goatees are not permitted.

(d) Side burns shall be neatly trimmed close to the face and shall not extend below the lower extremity of the ear.

8. That the regulations provide further that an inspecting officer may order a fireman to correct a violation if in such inspecting officers opinion such violation might impair the full effectiveness of the face mask.

9. Subsequent to July 1, 1974, disciplinary proceedings to be followed for a violation of the aforementioned regulation were issued by the defendant and provided for the dismissal of any fireman who failed to comply with the regulation. (Annexed hereto, made a part hereof and marked Exhibit "B" is a true and exact copy of said letter procedure).

10. That your deponent has had hair down to his shoulders, a goatee and mustache for three years prior to July 1, 1974. All of same being in violation of the aforementioned regulation.

11. That during said period your deponent has fought numerous fires, and engaged in numerous other activities which exposed your deponent to extensive heat, flame, smoke, noxious and poisonous gases, and that in none of said instances did your deponent's hair ignite into flames.

12. That in none of said instances when your deponent was required to put on a face mask to protect himself against smoke, noxious and poisonous gases did your deponent suffer any adverse effects as a result of being exposed to said foreign substances since in each case your deponent obtained a proper seal with the face mask.

13. That in addition, Fire Department Regulations as set forth in Training Bulletin, Mask 1, issued March 19th, 1966, require firemen at the Weekly Muti-Unit drill to put on the face mask and obtain a proper seal. Your deponent has undergone numerous such tests and has always obtained a proper seal and has never failed said test. (Annexed hereto, made a part hereof and marked Exhibit "C" is a true and exact copy of said Bulletin.)

14. That it is your deponent's desire to adopt a grooming standard personal to himself, which said standard would be in violation of the aforementioned regulation issued by the defendant, but to do so at the present time would subject your deponent to dismissal from his position.

15. That your deponent respectfully submits that the aforementioned regulation and enforcement thereof is a violation of your deponent's personal liberty and constitutional rights as provided for in the First and Fourteenth Amendments to the United States Constitution, in that it imposes a purposeless restraint on your deponent's Constitutional rights, and further that said regulation having been adopted, upon information and belief, without a public hearing to establish its necessity violates your deponent's rights to due process.

16. That your deponent simultaneously with this motion is instituting a civil action against the defendant for a declaratory judgment and permanent injunction. (Annexed hereto, made a part hereof and marked Exhibit "D" is a true and exact copy of said Summons and Compleint).

AFFIDAVIT OF RICHARD CANTELLO
IN SUPPORT OF ORDER TO SHOW CAUSE

WHEREFORE, your deponent respectfully requests that the within application be in all respects granted.

s/ Richard Cantello
Richard Cantello

[Duly sworn to
July 17, 1974]

AFFIDAVIT OF EDWARD MORAN
IN SUPPORT OF ORDER TO SHOW CAUSE

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

[SAME TITLE]

STATE OF NEW YORK)
) SS.:
COUNTY OF QUEENS)

EDWARD MORAN, being duly sworn, deposes and says:

1. That your deponent resides at R.D. #2, N. Richardsville Road, Carmel, New York.

2. That your deponent has been a member of the New York City Fire Department and employee of the City of New York for four and one-half (4-1/2) years.

3. That the defendant is the Fire Commissioner of the City of New York, a municipal corporation.

4. That on July 1st, 1974, the defendant issued regulation PA/ID6-74 effective July 8th, 1974, establishing grooming standards for members of the Fire Department of the City of New York. (Annexed hereto, made a part hereof and marked Exhibit "A" is a true and exact copy of said regulation.)

AFFIDAVIT OF EDWARD MORAN
IN SUPPORT OF ORDER TO SHOW CAUSE

5. That prior to July 1st, 1974, the grooming standard in effect for the New York City Fire Department only required an individual fireman's hair to be neat and trimmed.

6. That the aforementioned regulation PA/ID6-74 issued July 1st, 1974, by its own terms was based upon the following:

(a) It is impossible to obtain a satisfactory seal with a face mask on a bearded man.

(b) Flowing hair is more readily ignited and hair excessive to any degree, acts as an insulator.

(c) Exposed hair is a breeding place for germs, and that lacerations occurring on hair covered surfaces subject said injury to infection and complicate the injury and extend the time for recuperation from said injury.

7. That said regulation states in part:

(a) Hair on top of the head shall not be excessive in length at any point and that hair at the back of the neck shall not extend below the shirt collar.

(b) Mustaches are not permitted to extend beyond the corners of the mouth nor below any portion of the upper lip.

(c) Beards or goatees are not permitted.

(d) Side burns shall be neatly trimmed close to the face and shall not extend below the lower extend below the lower extremity of the ear.

8. That the regulations provide further that an inspecting officer may order a fireman to correct a violation if in such inspecting officers opinion such violation might impair the full effectiveness of the face mask.

9. Subsequent to July 1, 1974, disciplinary proceedings to be followed for a violation of the aforementioned regulation were issued by the defendant and provided for the dismissal of any fireman who failed to comply with the regulation. (Annexed hereto, made a part hereof and marked Exhibit "B" is a true and exact copy of said letter procedure.)

10. That your deponent has had long hair down to the middle of his back, mustache and goatee for a substantial period of time prior to July 1,

1974. All of same being in violation of the aforementioned regulation.

11. That during said period your deponent has fought numerous fires, and engaged in numerous other activities which exposed your deponent to extensive heat, flame, smoke, noxious and poisonous gases, and that in none of said instances did your deponent's hair ignite into flames.

12. That in none of said instances when your deponent was required to put on a face mask to protect himself against smoke, noxious and poisonous gases did your deponent suffer any adverse effects as a result of being exposed to said foreign substances since in each case your deponent obtained a proper seal with the face mask.

13. That in addition, Fire Department Regulations as set forth in Training Bulletin, Mask 1, issued March 19th, 1966, require firemen at the Weekly Muti-Unit drill to put on the face mask and obtain a proper seal. Your deponent has undergond numerous such tests and has always obtained a proper seal and has never failed said test. (Annexed hereto,

made a part hereof and marked Exhibit "C" is a true and exact copy of said Bulletin.)

14. That it is your deponent's desire to adopt a grooming standard personal to himself, which said standard would be in violation of the aforementioned regulation issued by the defendant, but to do so at the present time would subject your deponent to dismissal from his position.

15. That your deponent respectfully submits that the aforementioned regulation and enforcement thereof is a violation of your deponent's personal liberty and constitutional rights as provided for in the First and Fourteenth Amendments to the United States Constitution, in that it imposes a purposeless restraint on your deponent's Constitutional rights, and further that said regulation having been adopted, upon information and belief without a public hearing to establish its necessity violates your deponent's right to due process.

16. That your deponent simultaneously with this motion is instituting a civil action against the defendant for a declarator judgment and permanent

injunction. (Annexed hereto, made a part hereof and marked Exhibit "D" is a true and exact copy of said Summons and Complaint).

WHEREFORE, your deponent respectfully requests that the within application be in all respects granted.

s/ Edward Moran
Edward Moran

[Duly sworn to
July 17, 1974]

AFFIDAVIT OF JAMES J. SEABARKROB
IN SUPPORT OF ORDER TO SHOW CAUSE

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

[SAME TITLE]

STATE OF NEW YORK)
) SS.:
COUNTY OF QUEENS)

JAMES J. SEABARKROB, being duly sworn, deposes and says:

1. That your deponent resides at 58 Ridgecrest Avenue, Staten Island, New York.

2. That your deponent has been a member of the New York City Fire Department and employee of the City of New York for five (5) years.

3. That the defendant is the Fire Commissioner of the City of New York, a municipal corporation.

4. That on July 1st, 1974, the defendant issued regulation PA/ID6-74 effective July 8th, 1974, establishing grooming standards for members of the Fire Department of the City of New York. (Annexed hereto, made a part hereof and marked Exhibit "A" is a true and exact copy of said regulation.)

AFFIDAVIT OF JAMES J. SEABARKROB
IN SUPPORT OF ORDER TO SHOW CAUSE

5. That prior to July 1st, 1974, the grooming standard in effect for the New York City Fire Department only required an individual fireman's hair to be neat and trimmed.

6. That the aforementioned regulation PA/ID6-74 issued July 1st, 1974, by its own terms was based upon the following:

(a) It is impossible to obtain a satisfactory seal with a face mask on a bearded man.

(b) Flowing hair is more readily ignited and hair ex[illegible]sive to any degree, acts as an insulator.

(c) Exposed hair is a breeding place for germs, and that lacerations occurring on hair covered surfaces subject said injury to infection and complicate the injury and extend the time for recuperation from said injury.

7. That said regulation states in part:

(a) Hair on top of the head shall not be excessive in length at any point and that hair at the back of the neck shall not extend below the shirt collar.

(b) Mustaches are not permitted to extend beyond the corners of the mouth nor below any portion of the upper lip.

(c) Beards or goatees are not permitted.

(d) Side burns shall be neatly trimmed close to the face and shall not extend below the lower extremity of the ear.

8. That the regulations provide further that an inspecting officer may order a fireman to correct a violation if in such inspecting officers opinion such violation might impair the full effectiveness of the face mask.

9. Subsequent to July 1, 1974, disciplinary proceedings to be followed for a violation of the aforementioned regulation were issued by the defendant and provided for the dismissal of any fireman who failed to comply with the regulation. (Annexed hereto, made a part hereof and marked Exhibit "B" is a true and exact copy of said letter procedure).

10. That your deponent has had excessively long hair on top of his head which extended below the collar for a substantial period of time prior to

July 1, 1974. The above being in violation of the aforementioned regulation.

11. That during said period your deponent has fought numerous fires, and engaged in numerous other activities which exposed your deponent to extensive heat, flame, smoke, noxious and poisonous gases, and that in none of said instances did your deponent's hair ignite into flames.

12. That in none of said instances when your deponent was required to put on a face mask to protect himself against smoke, noxious and poisonous gases did your deponent suffer any adverse effects as a result of being exposed to said foreign substances since in each case your deponent obtained a proper seal with the face mask.

13. That in addition, Fire Department Regulations as set forth in Training Bulletin, Mask 1, issued March 19th, 1966, require firemen at the Weekly Muti-Unit drill to put on the face mask and obtain a proper seal. Your deponent has undergone numerous such tests and has always obtained a proper seal and has never failed said test. (Annexed hereto,

made a part hereof and marked Exhibit "C" is a true and exact copy of said Bulletin.)

14. That it is your deponent's desire to adopt a grooming standard personal to himself, which said standard would be in violation of the aforementioned regulation issued by the defendant, but to do so at the present time would subject your deponent to dismissal from his position.

15. That your deponent respectfully submits that the aforementioned regulation and enforcement thereof is a violation of your deponent's personal liberty and constitutional rights as provided for in the First and Fourteenth Amendments to the United States Constitution, in that it imposes a purposeless restraint on your deponent's Constitutional rights, and further that said regulation having been adopted, upon information and belief, without a public hearing to establish its necessity violates your deponent's rights to due process.

16. That your deponent simultaneously with this motion is instituting a civil action against the defendant for a declaratory judgment and permanent

injunction. (Annexed hereto, made a part hereof and marked Exhibit "D" is a true and exact copy of said Summons and Complaint).

WHEREFORE, your deponent respectfully requests that the within application be in all respects granted.

s/ James J. Seabarkrob
James J. Seabarkrob

[Duly sworn to
July 17, 1974]

AFFIDAVIT OF RICHARD T. HAEFELI
IN SUPPORT OF ORDER TO SHOW CAUSE

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

[SAME TITLE]

STATE OF NEW YORK)
) SS.:
COUNTY OF SUFFOLK)

RICHARD T. HAEFELI, ESQ., being duly sworn, deposes and says:

1. That your deponent is associated with the firm of MEYER & WEXLER, ESQS., attorneys for the plaintiffs herein and as such is fully familiar with all of the facts and circumstances as hereinafter set forth.

2. That your deponent respectfully submits to this Court that not only is the grooming standard which has been adopted and is presently being enforced by the defendant a violation of the plaintiffs' constitutional rights to personal liberty and equal protection as provided for in the First and Fourteenth Amendment to the United States Constitution, but since the defendant did not subject said regulation to a public hearing to establish its necessity, the adoption of same violates the plaintiffs' constitutional right of due process.

AFFIDAVIT OF RICHARD T. HAEFELI
IN SUPPORT OF ORDER TO SHOW CAUSE

3. That in addition since said regulation is vague, and susceptible to varing interpretations it is unconstitutional in that it subjects the plaintiffs to loss of their job without the plaintiffs' being adequately or properly advised as to what conduct violates the regulation.

4. That in view of the constitutional nature of the issues involved and that the plaintiffs constitutional rights are presently being violated by the defendant, the plaintiffs do not have an adequate remedy at law, and an Order to show cause is necessary since time is of the essence.

5. That no prior application for the relief sought herein has been requested in this or in any other Court.

WHEREFORE, your deponent respectfully requests that the within application be in all respects granted.

s/_____
Richard T. Haefeli

[Duly sworn to
July 17, 1974]

EXHIBIT "C" - TRAINING BULLETIN - ANNEXED TO ORDER TO SHOW CAUSE

Issued March 1966 — Training Bulletin MASKS 1

SELF-CONTAINED OPEN-CIRCUIT DEMAND BREATHING APPARATUS

The self-contained open-circuit demand breathing apparatus supplies the wearer with the required amount of pure breathing air and exhausts the expired air to the atmosphere. It may be safely used in any atmosphere EXCEPT one which is contaminated by chemical or radioactive particles that may penetrate through, or irritate the skin. However, it will protect against inhalation of airborne radioactive particles. Breathing equipment does not protect against flame, heat or heat exhaustion.

The value of this important equipment should be apparent to all members. Continuous training by all members in the use and care of the demand type breathing equipment cannot be overemphasized. Therefore:

1. Members should be constantly trained to know how and when to use the mask.
2. Members should practice donning mask until speed and accuracy are attained.
3. Special attention and instruction should be given to new members.
4. Training should require exertion by the wearer in order to become familiar with the mask under working conditions.
5. The mask should be cleaned, disinfected and checked in accordance with this bulletin for the protection of the health of department personnel.

DESCRIPTION:

1. Facepiece:

This is a close fitting full face, rubber facepiece so constructed that the inhaled air, from the cylinder, is directed against the inside of unbreakable plastic lenses to eliminate fogging. It is held in place by a rubber spider, with six straps for adjusting the fit. A diaphragm exhalation valve, that permits communication, is protected by a metal cover guard. There is a non-collapsing inhalation tube, constructed of flexible rubber, which connects the inhalation fitting of the

facepiece to the low pressure side of regulator, by use of quick-connect coupling.

2. Regulator

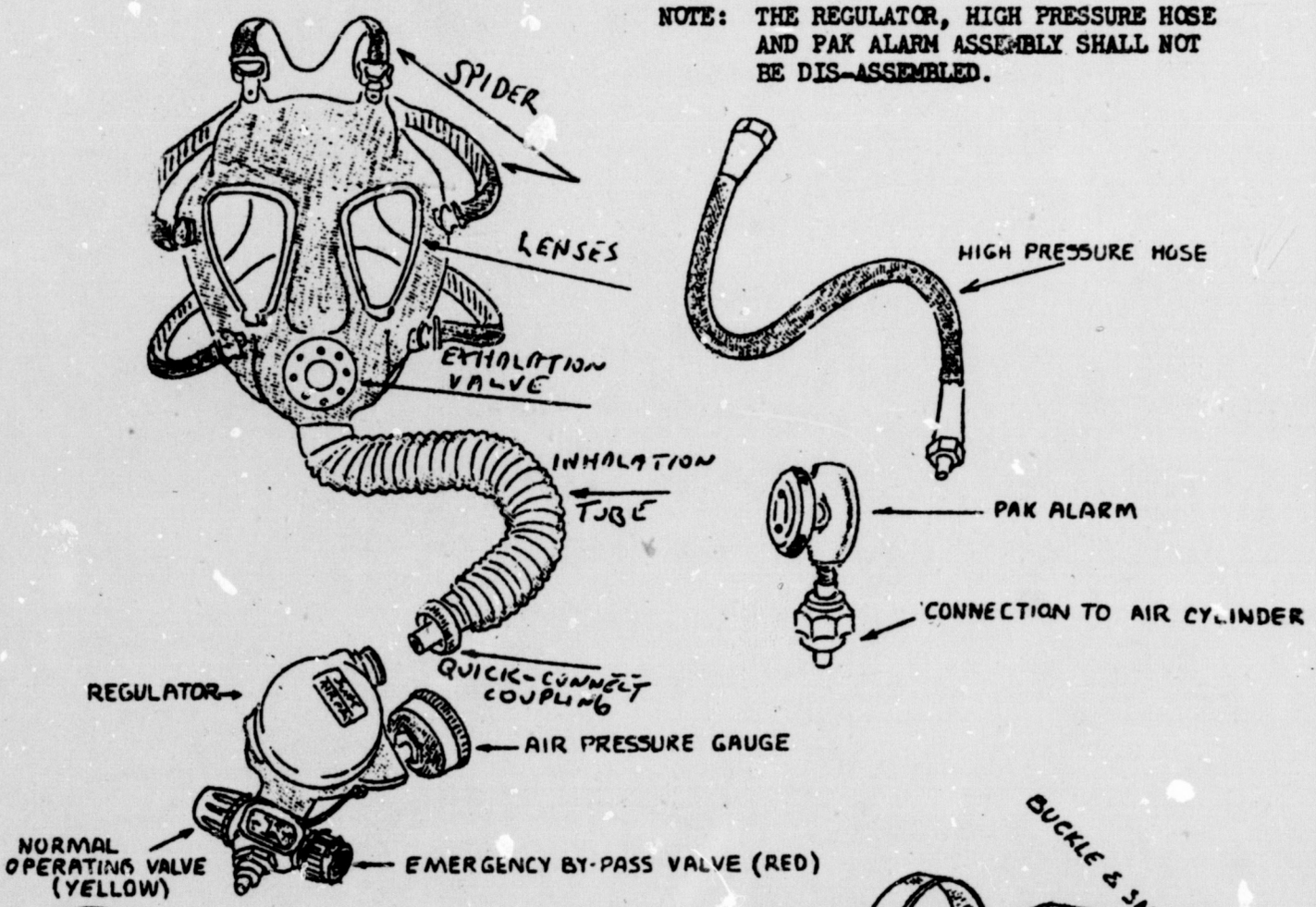
This is a precision device designed to reduce high cylinder pressure to a low, safe limit. It will conduct air from cylinder supply through passages of a limited area so that in case of failure of the regulator, the size of the openings alone would reduce the pressure to protect the wearer. In operation, it will supply air to the wearer in accordance with his breathing demands. In addition, to conform to the Bureau of Mines requirements, each regulator is provided with a normal operating valve and an emergency by-pass valve. These valves operate as follows: (a) Normal Operating Valve: A knob, colored YELLOW, is turned counterclockwise and locked in the fully opened position by a ring nut during normal operating conditions.

(b) Emergency By-Pass Valve: A know, colored RED, is kept in the fully closed position during normal operating conditions. If the regulator becomes inoperative, during operations, the RED KNOB should be turned counterclockwise to open it. THEN, the YELLOW KNOB should be turned clockwise to the fully closed position. This action provides a CONTINUOUS flow of air to the facepiece by-passing the regulator mechanism. This airflow can be manually regulated to suit the wearer's needs.

EXHIBIT "C" - TRAINING BULLETIN - ANNEXED TO ORDER TO SHOW CAUSE

FACEPIECE, REGULATOR AND PAK ALARM ASSEMBLIES

NOTE: THE REGULATOR, HIGH PRESSURE HOSE AND PAK ALARM ASSEMBLY SHALL NOT BE DIS-ASSEMBLED.



CYLINDER AND HARNESS ASSEMBLIES

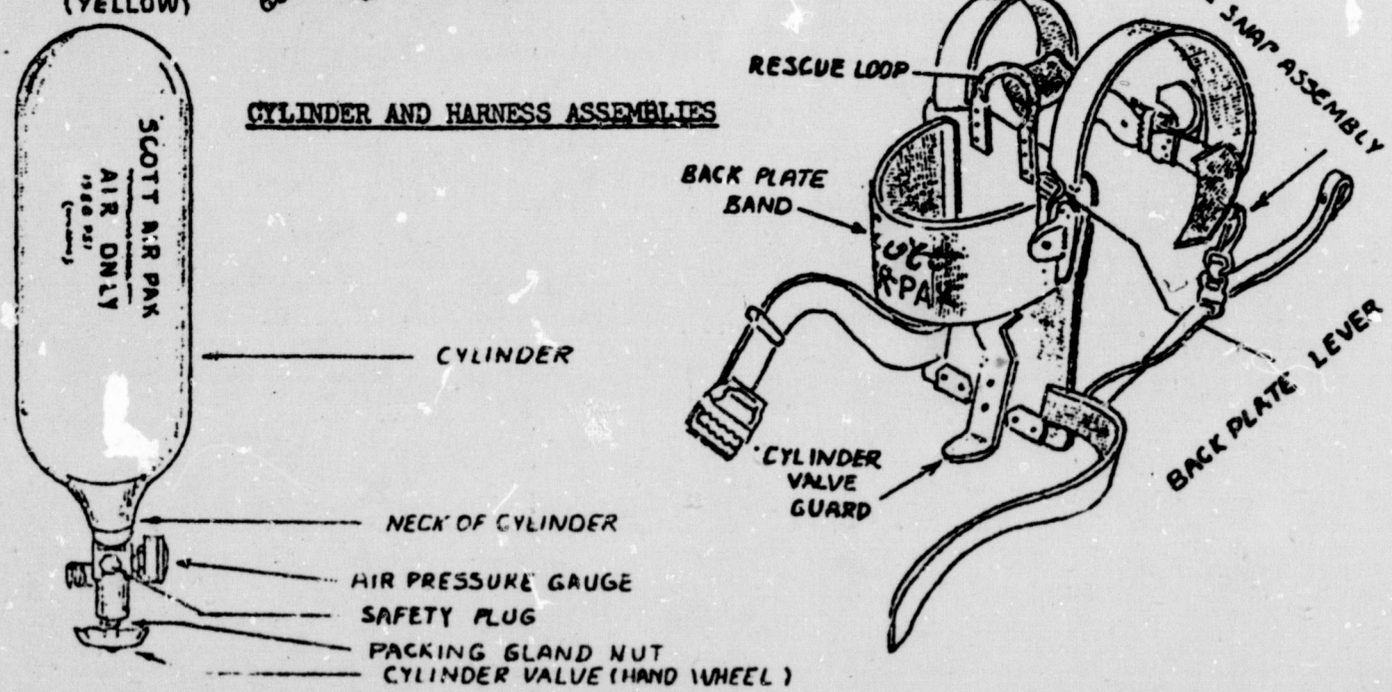


EXHIBIT "C" - TRAINING BULLETIN - ANNEXED TO ORDER TO SHOW CAUSE

c. High Pressure Regulator Gauge:-Fitted on the regulator is a high pressure gauge giving the pressure in the cylinder while in operation (NOTE: When normal operating valve is closed and the emergency by-pass valve is open, no reading will be registered on this gauge).

3. High Pressure Hose:
Reinforced, flexible and rubber jacketed, this hose has the ability to withstand 5000 psi. It connects the demand regulator to the cylinder and is designed to permit quick replacement of an expended cylinder without removing apparatus from wearer.

4. Pak Alarm:
A mechanism that sounds an alarm when the pressure in the cylinder is reduced to approximately 400 psi. It is automatically cocked when the cylinder valve is opened and uses a negligible amount of air during its ringing period. The ringing is continuous until the pressure reaches approximately 100 psi.

5. Cylinder:
It is constructed of high grade steel, conforming to ICC Regulations, and contains 40.3 cubic feet of compressed breathing air at 1980 lbs. psi. It is approved by the Bureau of Mines for one-half hour of continuous use when fully charged. There is an individual cylinder pressure gauge that shows the pressure at all times. The cylinder will withstand an internal pressure of 3000 psi and has a safety plug that relieves at 2700 psi.

6. Harness:
This consists of neoprene treated, heavy duty webbing with metal buckles and locking snap assemblies. These are connected to a metal backplate that has a rescue loop at the top for attaching a line. A loop on the regulator is held in position, on the left breast strap, by means of a removable snap fastener or slide buckle. The harness is designed to permit free use of limbs and treated to resist damage from acids, corrosion or mildew.

EXHIBIT "C" - TRAINING BULLETIN - ANNEXED TO ORDER TO SHOW CAUSE

7. Protective Case:
This is constructed of fibre and wood, with metal rub guards, and fitted with a handle, similar to a suitcase, to provide easy portability.

8. Weight of Apparatus:
The weight of the apparatus, including cylinder, is thirty (30) pounds.

INSPECTION PROCEDURE:

1. Daily Inspection Procedures:
Masks shall be inspected immediately after 9 A.M. and 6 P.M. Roll Calls in accordance with the Regulations, and the following instructions:
   a. Proper storage in dry condition on apparatus.
   b. Proper assembly and position of mask in case.
   c. Facepiece straps fully loosened and lenses intact.
   d. Sufficient air pressure in cylinder (1200 psi or more).
   e. Proper position of valves. Cylinder Valve closed - Normal Operating Valve in open position - Emergency By-Pass Valve Closed.
   f. Proper condition of inhalation tube. Visual check, by stretching tube, for breaks and punctures.
   g. Thorough cleanliness of all parts.

2. Weekly Inspection Procedures:
Masks shall be inspected weekly at Multi-Unit Drills in accordance with the Regulations, and the following instructions:
   a. Masks shall be donned and operating condition of all parts checked by wearer of mask.
   b. Pressure indicated on cylinder gauge checked against pressure indicated on regulator gauge. A difference of 200 psi or more indicates a possible defect. Check by connecting regulator to spare cylinder.

3. Inspection after use:-
After use at fires and emergencies, the following checks shall be made: (In addition to daily and weekly checks)

EXHIBIT "C" - TRAINING BULLETIN ANNEXED TO ORDER TO SHOW CAUSE

a. Harness and fittings sound.
b. Screws in regulator assembly in position and tight.
c. Bezel rings on pressure gauges tight.
d. Snap fastener or slide buckle on left breast strap that holds regulator properly in place. If lost, request replacement.
e. Cylinder valve closed. Exhaust air in the regulator by sucking air out of threaded coupling atop regulator until gauge reads ZERO. This, in addition to removing all air from the regulator, serves as a test for the regulator mechanism. One or two breaths should exhaust the air from the regulator and give a ZERO reading. If, however, you are able to continue to exhaust air from the regulator, with the valve closed, or the regulator gauge continues to show a reading, this indicates that the regulator gauge is defective and in need of repair.

CLEANING THE MASK:-

After use at fires and emergencies, equipment shall be cleaned in the following manner:

a. Remove the assembly from carrying case and detach high pressure hose from cylinder. Remove cylinder from harness.
b. Remove snap fastener or slide buckle on left breast strap and slide regulator loop assembly off strap. Lay regulator assembly carefully aside.
c. With a warm detergent, or soap and water solution, wash entire equipment. EXCEPT REGULATOR AND PAK ALARM. Rinse with clean water and hang to air dry.
d. After completely washing facepiece and inhalation tube rinse by running clean water through inhalation tube and letting it flow out through openings at the lenses.
e. If disinfecting is necessary, do so only after washing and rinsing. To disinfect, immerse facepiece and tube in germicide solution of four (4) ounces of disinfectant to one (1) gallon of water for fifteen (15) minutes. Hang and dry COMPLETELY. Check exhalation valve. (DO NOT PACK AWAY WHILE STILL MOIST). (RINSE BEFORE AND AFTER GERMICIDE IS USED).

f. Carrying case should be thoroughly cleaned. Dirt left in the case will find its way into facepiece and regulator openings.
g. To clean regulator assembly and pak alarm, protect opening with thumb and use a clean damp rag or sponge.

GENERAL MAINTENANCE:-

a. Cylinder hand wheel must be tight. Check Allen Screw or drift pin.
b. Threads on cylinder valve if exposed must be protected, preferably with plastic cap supplied as original equipment.
c. Cylinders should NEVER be picked up or carried by cylinder hand wheel. Proper manner is with neck of cylinder between fingers at a point below the cylinder gauge.
d. Caution in handling cylinders shoul<u>d always</u> be practiced. A sharp blow or a fall can damage the cylinder, cause damage to valve threads or blow the fusible plugs.
e. Store wrench, supplied with mask, in proper place in case.
f. REPAIRS ARE TO BE MADE <u>ONLY</u> BY MASK SERVICE UNIT. This has particular application to the regulators and pak alarm assemblies. However, this should not prevent members from performing general maintenance, such as tightening screws, nuts and cylinder packing nut.

<u>REPLACING OF CYLINDERS</u>:-

When in quarters and it is noted that the cylinder pressure is less than 1200 psi, cylinders should be removed from the mask and replaced by a fully charged spare cylinder. When the change is made, the assembly should be placed on another member and adjusted so that the regulator fits flat against the chest and the high pressure hose is as close to the wearer as possible (to prevent snagging). The cylinder that was removed should be used for drill purposes. When drilling, if the pak alarm sounds the cylinder valve should be closed to leave a residual pressure in the cylinder. Never leave the valve open even if the cylinder is empty. Leaving the valve open tends to ventilate interior with atmospheric air and thus introduce moisture which could cause rust inside of cylinder. When replacing cylinders in the mask assembly, the following steps should be used:

EXHIBIT "C" - TRAINING BULLETIN - ANNEXED TO ORDER TO SHOW CAUSE

a. Remove pak alarm coupling from cylinder valve.
b. Release backplate lever on band holding cylinder.
c. Lift cylinder up and out of backplate band.
d. Replace cylinder by reversing above procedure. In addition, while tightening backplate lever, hold cylinder slightly above cylinder wheel guard and point cylinder valve opening toward left hip side of backplate. (Cylinder hand wheel should be positioned high enough above guard so that cylinder valve can be fully opened).
e. When replacing cylinder DURING FIRE OPERATIONS always work in fresh air by leaving contaminated or fire area.

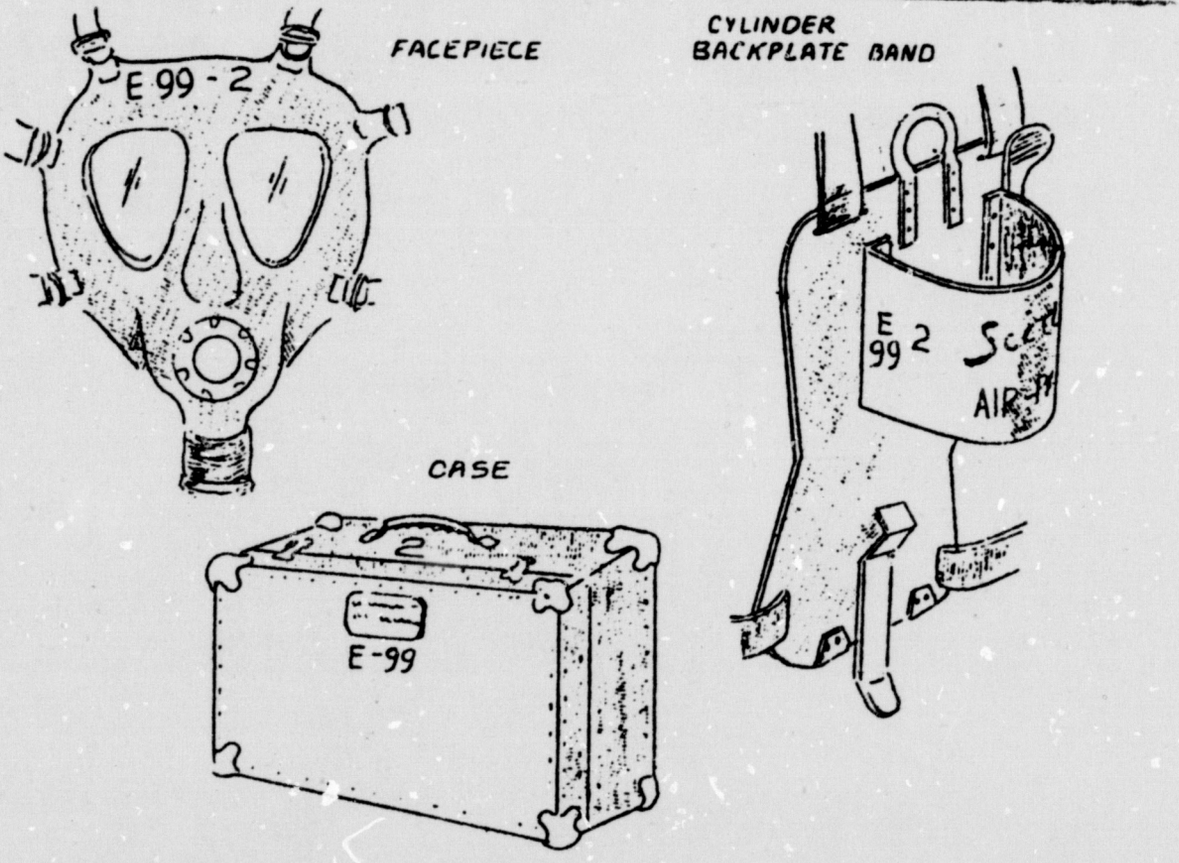
PRECAUTIONS TO BE OBSERVED:-

a. Cylinder air pressure must be known at the start of drill or operations.
b. User must be aware of air content remaining in the cylinder. When pak alarm sounds or the pointer on the gauge approaches the solid area on the dial, contaminated or fire area should be vacated, as only approximately four (4) minutes of air supply remains. However, there may be situations where four (4) minutes may not be enough time to reach a place of safety and added escape time must be allowed.
c. The rated one-half hour supply of a full cylinder may be reduced by extra exertion or rapid breathing on the part of the wearer.
d. Normal heat perception is reduced by wearing a mask. It is good practice when working at fires with this equipment, to occasionally remove a glove from hand and feel for dangerous temperature conditions, particularly overhead.
e. Under water use of the mask is NOT APPROVED.

EXHIBIT "C" - TRAINING BULLETIN - ANNEXED TO ORDER TO SHOW CAUSE

IDENTIFICATION OF MASKS:-

The facepiece, case, and cylinder backplate band, shall be marked with the unit number and mask number as illustrated.



Mask numbers shall follow in consecutive order, i.e. 1 - 2 - 3 - etc.
Paint shall not be applied to the harness webbing.
Cylinders shall not be marked or identified except that chalked numbers should be used on spare cylinders to coincide with the Spare Cylinder Record Card.

AFFIDAVIT OF ROBERT F. MENDES
IN OPPOSITION TO MOTION
FOR PRELIMINARY INJUNCTION

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

[SAME TITLE]

STATE OF NEW YORK)
: SS.:
COUNTY OF NEW YORK)

ROBERT F. MENDES, being duly sworn, deposes and says:

1. I am an Assistant Chief in the New York Fire Department and hold the position of Deputy Chief of Staff in the Personnel Division.

2. Based upon continuing research by defendant of the most up to date safety for fire fighting and upon empirical studies and reports of experts in the field of fire fighting, the Fire Department issued a directive concerning Health and Safety Standards for Hair and Beards on July 8, 1974.

3. The purpose of establishing these standards was to effect maximum safety and security for the fire fighting personnel of the New York City Fire Department.

4. Preliminarily, it should be noted that each fire fighter at frequent intervals makes use of

the Scott Air Pak, a self contained breathing apparatus which is strapped to his back while operating in oxygen deficient atmosphers.

5. The use of a mask over any area of the face covered with hair is less efficient because the hair prevents complete adhesion and increases seepage of air out of the mask.

6. Additional safety problems are created by the presence of facial hair besides those incidental to the use of the Scott Air Pak. The medical treatment of burns and cuts is hapered by the concealing effects of facial hair and the coagulation of blood on facial hair increases the possibility of infection.

7. The procedure of mouth-to-mouth or mouth-to-nose resuscitation is obstructed by the presence or hair impeding the flow of air to the lungs. Beards serve to entrap nasal exudations and vomit which serves to interfere with the resuscitation procedure from both a medical and hygienic standpoint. Treatment and diagnosis is simplified if the injured area is not obscured by masses of hair.

8. Fireman are often called upon to perform in super-heated atmospheres wearing rubberized,

protective uniforms that insulate the wearer from heat. Such a protective covering insensitizes the wearer's body to heat and temperature change. Since the back of the neck and the ears serve as a safety thermometer, the insulating effect of hair on this facility is potentially dangerous to the safety of the individual fireman.

9. The presence of excessive facial hair serves to retard the dissipation of body heat through perspiration, the significance of which is magnified by the use of the face mask.

10. Authorities in the field of fire fighting have concluded that beard growth and excessive facial hair substantially increase leakage of all face masks and substantially detract from their efficiency.

11. A study entitled "The Effect of Facial Hair on Respirator Performance" released by the Los Alamos Scientific Laboratory concludes that the incidence of noxious penetration through the sides of a face mask increases in direct proportion of the beard growth of the user, id, p. 12.

12. The purpose of the regulations concerning hair length is to minimize the hazards incidental to fire-fighting. Long hair affords the fire fighter the

Hobson's choice of either permitting loose or braided hair to dangle below the neckline, exposing an unprotected and highly combustible material to hot embers and flames, or gathering the hair in a pile at the tip of his scalp and thereby interfering with the protective fit of his face mask.

13. It is significant that the Fire Department Regulation herein affect only those firemen assigned to active fire fighting duty and exposed to hazardous atmospheres. In this regard, it is to be noted that the plaintiffs have been assigned to clerical positions pending the disposition of the application herein.

14. The President of the Uniformed Firefighters Association has urged compliance with the departmental regulations at issue in a letter to the membership of the Association dated June 3, 1974. (A copy of this letter is annexed hereto).

15. It is respectfully submitted that the regulations challenged herein are reasonably related to the achievement of maximum safety and efficiency in firefighting. In relation to the interest of the Fire Department in efficiently and safely performing

its functions and of the public interest in maximum protection to lives and property against destruction by fire, the interest of the plaintiffs in their cosmetic fixation must fall, especially in view of the fact that they do not reflect the sentiments of the rank-and-file members of the department.

16. Other Courts which have considered grooming regulations similar to those challenged herein have upheld the regulations concluding that the safety justification out weighed the counter-vailing interest of the individual firefighter in a personal hair style.

17. Based upon the foregoing, it is respectfully urged that this Court refuse to interfere with defendant's proper and lawful determination aimed at maximizing safety and efficiency in fire fighting and deny the application for injunctive relief.

WHEREFORE defendant respectfully request an order vacating the temporary restraining order previously entered and further that the Court deny

plaintiffs' application for injunctive relief in all respects.

s/
Robert F. Mendes

[Duly sworn to
July 23, 1974]

EXHIBIT - ARTICLE ENTITLED "INFLUENCE OF FACEMASK DESIGN ON OPERATIONAL PERFORMANCE - ANNEXED TO AFFIDAVIT OF ROBERT F. MENDES

Do Beards, Sideburns Make a Difference?

Influence of Facemask Design on Operational Performance

by O. G. Griffin and D. J. Longson, Safety in Mines Research Establishment, Department of Trade and Industry, Sheffield, England, © British Crown Copyright, 1971*

THE increasing use of full facemasks with respiratory apparatus emphasizes the need for accurate methods of evaluating their efficiency. All facemasks leak to some extent; the leakage is past the peripheral seal and is governed by the fit of the mask, which can be adversely affected by facial hair, movement of the head and of the facial muscles.

INWARD LEAKAGE — Recent methods, which have been described, employ either an aerosol or a halogenated hydrocarbon gas in the atmosphere surrounding the mask. The aerosol methods, which include the use of sodium chloride (Hounam, 1962; Hounam et al. 1964), uranine (Burgess et al. 1961) and bacterial spores (Guyton et al. 1967; Letts, 1961), are not, in general, considered suitable for the rapid determination of inward leakage of gas into a full facemask. The sodium chloride aerosol method in particular suffers from the disadvantage that particles are absorbed in the respiratory tract and that the subject must breathe regularly, and there may, therefore, be difficulties in applying the method while the subject is exercising. Halogenated hydrocarbons, e.g. dichlorodifluoromethane (freon 12) (Morgan, 1964), have the disadvantage of being mildly toxic so that the concentration in the test gas atmosphere must be kept relatively low; the sensitivity of the method may therefore be limited.

A dynamic method developed at the Safety in Mines Research Establishment, determines accurately the leakage of the external atmosphere into the mask while the subject is performing various exercises. In this method the subject, wearing the facemask complete with breathing tubes, is enclosed in a transparent plastics hood large enough for him to move his head while wearing the mask (Fig. 1). Pure argon is fed into the top of the hood from a regulated cylinder supply. Argon is used as the atmosphere in the hood because it is physiologically inert and inexpensive, and is available in a pure form.

The subject inhales medical quality oxygen supplied from a cylinder fitted with a pressure reducer and a lung-governed demand valve, so that the wearer can draw as much oxygen as he needs. The oxygen breathing tube is fitted with a sampling port. A spirometer measures the volume of oxygen used.

The facemask is fitted with two non-return valves, controlling the direction of flow of oxygen in the two breathing tubes. The exhaled gas passes through the second breathing tube into a sampling bladder, fitted with a sampling port, and then passes to atmosphere.

The amount of argon in the exhaled gas is determined by means of an MS10 mass spectrometer. This instrument is capable of detecting at least 10 ppm of argon in the exhaled breath. A multiway tap is connected to the spectrometer and the various sampling ports. Sampling is by means of a small suction pump. With the mass spectrometer tuned to mass number 40, the principal number of argon, and the multiway tap positioned to sample the wearer's oxygen supply, a trace is obtained on the mass spectrometer recorder which corresponds to the concentration of argon in the oxygen supply; this is usually less than 50 ppm. The tap is then repositioned to enable the exhaled breath in the sampling bladder to be sampled. A

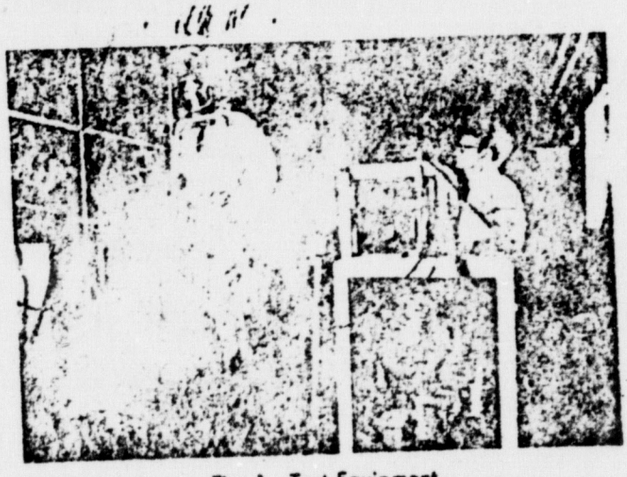


Fig. 1. Test Equipment

*Presented at the Third Annual Symposium on Portable Life Support Systems, Ames Research Center, California, May, 1971.

second trace is obtained on the recorder corresponding to the concentration of argon in the exhaled breath. The difference between the two gives a measure of the rate of flow of argon leaking into the mask.

In each test the subject walks at 4 mph (6.4 km/h) on a treadmill inclined at 2½° (Fig. 1), and carries out slowly, in his own time, a prearranged series of head movements.

This method has been used to determine the inward leakage rate into various facemasks in two series of experiments.

The first series (a) with twenty-nine clean-shaven subjects wearing two types of facemask.

The second series (b) with twelve unshaven subjects wearing three types of facemask.

(a) Experimental Results with Clean-shaven Subjects Wearing Two Types of Facemask

The two masks tested were of the plain-seal type and the pneumatic-seal type. The inward leakage rate of each type of mask was determined for twenty-nine clean-shaven subjects. The subjects (SMRE staff) fitted the facemasks themselves and checked for gross leakage by gripping the breathing tubes and trying to inhale. When leakage was apparent the mask was readjusted. No attempt was made to refit a mask during a test even when leakage became apparent. Tables 1 and 2 show the results obtained with the plain-seal mask and the pneumatic-seal mask. One subject, marked with an asterisk in Table 1, had a visible gap between the mask and face which could not be improved. The leakage is expressed in the conventional way, i.e., concentration of argon appearing in the exhaled breath.

TABLE 1

Leakage with plain-seal mask

Subject number	Minute volume l/min BTPS	Leakage : ppm Head steady	Head side to side	Head up and down	Head steady talking	Mean of the exercises
1	46.0	411	316	282	300	327
2	30.7	414	376	387	379	389
3	32.0	2090	1855	1722	836	1628
4†	–	–	–	–	–	–
5	40.1	128	107	92	86	103
6	48.2	3858	1760	11863	4512	5499
7	33.9	461	442	366	392	415
8	37.7	88	67	67	67	72
9	38.4	251	196	8467	–	2971
10	38.7	4734	6545	137	125	2900
11	36.6	980	1684	1113	602	1095
12	39.0	220	191	196	198	201
13	34.6	104	83	410	99	174
14	35.8	109	88	92	76	91
15	40.7	81	72	9458	129	2435
16	41.0	110	81	84	96	93
17	36.2	108	87	77	102	94
18	45.5	102	76	4397	1368	1468
19	40.8	429	433	481	533	469
20	47.8	834	482	182	99	399
21	44.2	131	94	95	113	108
22	38.1	111	192	1040	112	364
23	36.6	136	99	9637	460	2583
24	45.9	95	73	67	74	77
25	45.1	21364	16009	46253	61600	36307
26	38.6	168	522	772	245	427
27	43.8	725	651	630	648	664
28	39.0	149	130	28341	219	7210
29	39.0	792	983	1418	982	1039

†Visible gap between mask and face

TABLE 2

Leakage with pneumatic-seal mask

Subject number	Minute Volume l/min BTPS	Leakage : ppm Head steady	Head side to side	Head up and down	Head steady talking	Mean of the exercises
1	43.8	155	125	217	151	148
2	23.8	82	35	42	50	52
3	35.4	50	50	50	38	46
4	30.7	98	39	35	28	47
5	25.1	194	148	125	117	146
6	46.2	57	48	48	58	50
7	33.7	241	100	85	222	152
8	40.2	82	77	74	100	83
9	40.0	98	40	33	50	57
10	35.3	84	52	50	43	57
11	49.2	153	125	125	125	140
12	39.8	105	94	85	100	96
13†	–	–	–	–	–	–
14	38.3	534	359	82	52	257
15	46.2	154	138	150	150	148
16	44.7	180	105	110	176	143
17	46.4	188	138	119	150	148
18	43.3	65	35	42	50	43
19	41.1	148	125	118	237	157
20	43.8	132	45	80	90	87
21	49.2	47	42	40	60	47
22	43.4	69	75	71	52	67
23	50.4	35	42	58	58	44
24	44.2	75	75	75	75	75
25	32.4	48	90	172	271	146
26	40.8	32	25	25	25	27
27	38.4	140	130	67	255	148
28	34.5	62	217	142	250	168
29	34.7	88	84	84	86	75

†Badly fitting mask

The subject marked with an asterisk in Table 2 could not be fitted satisfactorily with a facemask; although no gap was visible between the mask and the face, leakage could be felt in the suction test and repeat fittings made no improvement.

The method described above allows facemask leakages of the order of 0.001 per cent to be detected. Also, the leakage may be measured while the subject is carrying out various exercises.

The results obtained using this method confirms the superiority of the pneumatic-seal type of mask compared to the plain-seal type. It is likely that the fit of the plain-seal mask can be improved by very careful adjustment by the subject or fitter. In exceptional cases however, there may be subjects who, because of facial characteristics, cannot be satisfactorily fitted with either type of facemask.

(b) Experimental Results with Unshaven Subjects Wearing Three Types of Facemask

These tests were conducted on 12 volunteers from the City of Manchester Fire Brigade. Two of the subjects normally wore a substantial beard (eg Fig. 2a). The other ten men had beard growths ranging from 15 days to one month. Three facemask leakage tests were carried out on each man:

(a) unshaven

(b) beard shaved — but sideburns left to below the ear lobe and

(c) clean-shaven

The results of these tests are shown in Tables 3, 4 and 5.

Some of the men had moustaches but these were always small enough to be completely contained within the masks. The two men who were normally bearded chose not to be completely clean-shaven but retained much smaller beards (eg Fig. 2b), supposedly small enough to lie within the sealing rim of the mask.

The three facemasks used in the tests were of the plain-seal, revert-seal and pneumatic-seal types. Each man wore the same mask for each of the three tests. Additional tests, in which the pneumatic-seal mask was worn by the subjects in the clean-shaven condition, were made with the subjects who wore the plain and revert-seal masks.

TABLE 3

Summary of facemask leakage results in ppm, obtained with the plain and revert seal facemasks and, when cleanshaven, the pneumatic seal facemask

Subject	Minute volume 1/min BTPS	Type of mask	Leakage : ppm Full beard	Sideburns only	Clean-shaven	Pneumatic type. Clean-shaven
R.S.	49.7	Revert	6,710	1,900	2,580	25
G.M.	56.7	Revert	13,220	10,140	20	25
B.P.	48.8	Plain	190*	25	25	25
L.J.	48.8	Plain	390	30	255	15
Average	50.7		5,130	3,020	720	22

*Beard growth not substantial

TABLE 4

Summary of facemask leakage results in ppm, obtained with the pneumatic seal facemask when worn by the two subjects with substantial beard growth

Subject	Minute volume 1/min BTPS	Leakage : ppm Full beard	Reduced beard with sideburns	Smaller beard within mask. No sideburns
L.R.	41.5	30,670	27,570	320
E.R.	51.1	11,730	55	225
Average	46.3	21,200	13,810	270

TABLE 5

Summary of facemask leakage results in ppm, obtained with six subjects wearing the pneumatic-seal facemask

Subject	Minute volume 1/min BTPS	Leakage : ppm Full beard	Sideburns only	Clean-shaven
M.B.	51.0	3,790	310	70
H.L.	57.0	470	25	20
F.K.	47.9	-†	790	25
L.R.	44.5	600	195	35
G.P.	42.8	5,130	35	30
B.B.	51.2	4,880	35	95
Average	49.1	2,970	235	45

†Substantial sideburns but no beard (Fig. 2c)

As before the subjects fitted the facemasks themselves and checked for gross leakage by gripping the breathing tubes and trying to inhale. When leakage was apparent the mask was re-adjusted. No attempt was made to refit a mask during a test even when leakage became apparent.

From this series of experiments it is concluded that when the subject has: —

A full beard — The results show that beard growth substantially increases the inward leakage rate of all the facemasks used in the tests.

Sideburns only — The results, as may be expected show considerable variation; modest sideburns (eg Fig 2d), that lie outside the facemask seal should, of course, give leakage rates very similar to those obtained in the clean-shaven condition. Large bushy sideburns (eg Fig. 2c), when sufficiently large and bushy to lie between the facemask seal and the face, are likely to cause a substantial increase in the leakage rate.

In all cases when the subject was clean-shaven the pneumatic-seal mask gave a low leakage figure whilst the revert-seal and plain-seal masks showed considerable variation in the leakage rate. In the case of the two men who retained a small beard, this was trimmed under the chin so that apparently no hair was across the mask seal before a fairly good fit could be obtained (eg Fig. 2b). The leakage rate, however, was still noticeably higher than with the clean-shaven subjects.

Discussion — When facemasks are worn in some toxic atmospheres a certain amount of leakage may be tolerable. It is important to remember, however, that this tolerable leakage will be less when the facemask is used with closed-circuit breathing apparatus than when it is worn with any other type of respiratory apparatus. This is because the toxic gas leaking in with each breath may accumulate in the air in the closed circuit. In practice, the concentration of gas breathed in by the wearer will rapidly increase to an equilibrium value which, in the case of carbon monoxide, would increase the concentration in the facemask by approximately 2.5 times the concentration that would otherwise have been breathed.

These results clearly demonstrate the superiority of the pneumatic-seal facemask. The manufacture of the plain-seal type has recently been discontinued in the United Kingdom; however, many plain-seal facemasks are still in regular use in industry. Since it appears that all facemasks leak, care must be taken in the choice of facemask and particular care must be exercised before facemasks are used in highly toxic atmospheres. Also it is important to remember that facial hair, when present between the face and the facemask seal, will substantially increase the facemask leakage.

Outward Leakage — Since inward leakage occurs in all the masks examined, outward leakage is also likely to occur when there is a positive pressure in the facemask. When facemasks are used with closed-circuit breathing apparatus, which normally supply oxygen to breathe, the outward leakage of oxygen may be sufficient to create a flammability hazard. (Denison and Tonkins 1967.)

EXHIBIT - ARTICLE ENTITLED "INFLUENCE OF FACEMASK DESIGN ON OPERATIONAL PERFORMANCE - ANNEXED TO AFFIDAVIT OF ROBERT F. MENDES

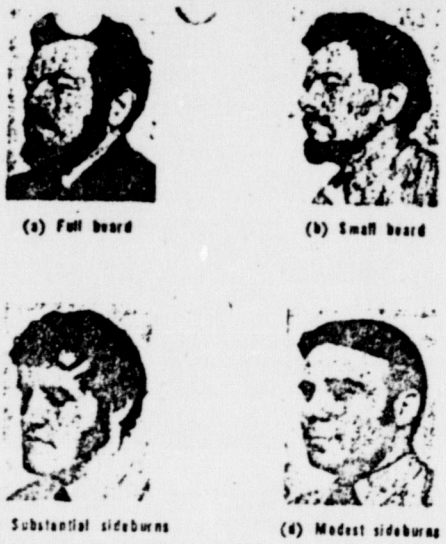


Fig. 2 Types of Beard Growth Investigated

In a series of tests, the outward oxygen leakage from full facemasks has been measured. Four types of mask were investigated, each type having been supplied as suitable for use with closed-circuit breathing apparatus. The four types were: (a) Plain-seal; (b) Revert-seal; (c) Pneumatic-seal; (d) Water-filled pneumatic-seal.

The leakage rate of each of the above facemasks was determined while the masks were being worn by four subjects of differing facial shapes and sizes. All the facemasks examined were supplied with two short breathing tubes fitted to a connecting piece at the front of the mask, and opening into the mask. Each subject wore, inside the facemask, a noseclip and mouthpiece. The mouthpiece was joined, by tubing that passed out through the connecting piece, to one of the breathing tubes. Such an arrangement allowed both inspiration and expiration to be independent of the air in the facemask. The second breathing tube was connected to an air line and maintained the pressure in the mask at a selected value, measured with a water manometer. The flow of air through this line at the selected pressure was measured by a flowmeter and was equal to the leakage rate out of the mask. The average values of the four subjects with each type of mask are shown in Figure 3.

In general, the pressures in a mask are determined by the breathing apparatus, and in particular by the relief valve. With an automatic relief valve the pressure in the mask depends largely on the opening pressure of the valve. With a manually-operated relief valve the position is rather more complicated, since the use that the wearer makes of the relief valve depends on his subjective response to breathing resistance.

When the pressure in the facemask approaches about 12 cm H_2O (1.2kN m^2) it is to be expected that the wearer will have difficulty in breathing out and he will become aware of the need to operate his relief valve. However, Figure 3 indicates that when facemasks of

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types a or b are worn in conjunction with the apparatus, there may be a substantial outward leakage at the mask that prevents such a buildup of pressure. In practice, it has been confirmed that some wearers of these masks, when preoccupied with work, do not feel the need to operate the relief valve; large outward leakage occurs, and the pressure in the mask on exhalation remains fairly constant at about 9 cm H_2O (0.9kN/m²). Less leakage occurs with wearers who use their relief valves, but the amount is still considerable. Pressure is reduced to about 4 cm H_2O (0.4kN/m²); this then increases to nearly 9 cm H_2O (0.9kN/m²) before the relief valves are used again. Outward mask leakage from facemasks of types c or d is substantially less than that from either types a or b.

A further series of experiments was carried out to examine the ignition hazard associated with mask leakage. A full facemask (type a) was fitted to a dummy head, and hair cuttings were placed around the edges of the mask. A controlled flow of oxygen was allowed to escape around the edges of the mask and attempts were made to ignite the hair cuttings; a glowing splint held near to the rim of the mask was used as the source of ignition. When the leakage rate exceeded 0.25 1/min the hair cuttings were ignited rapidly and the rim of the mask was also ignited. Reference to Figure 3 shows that when the pressure in masks type c and d is less than 12 cm H_2O (1.2kN/m²) the leakage is probably harmless.

This work confirms the need for care in the choice of facemasks, the importance of correctly fitting the facemask to the wearer and the advisability of using breathing apparatus supplied with a well-designed automatic relief valve.

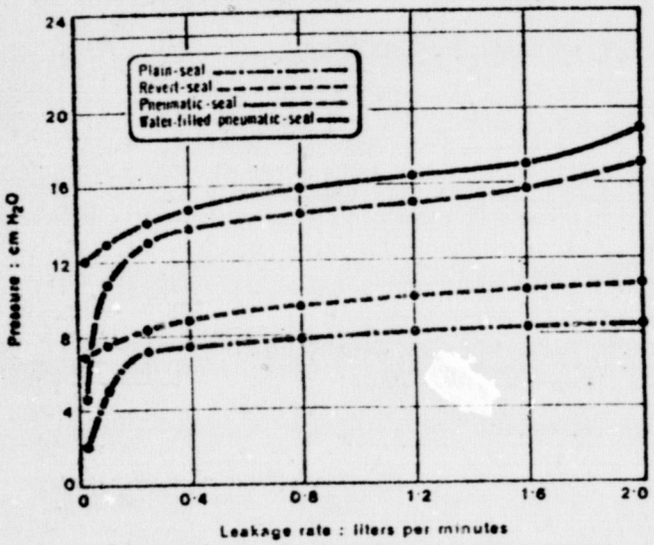

Fig. 3. Outward leakage rate from full facemasks

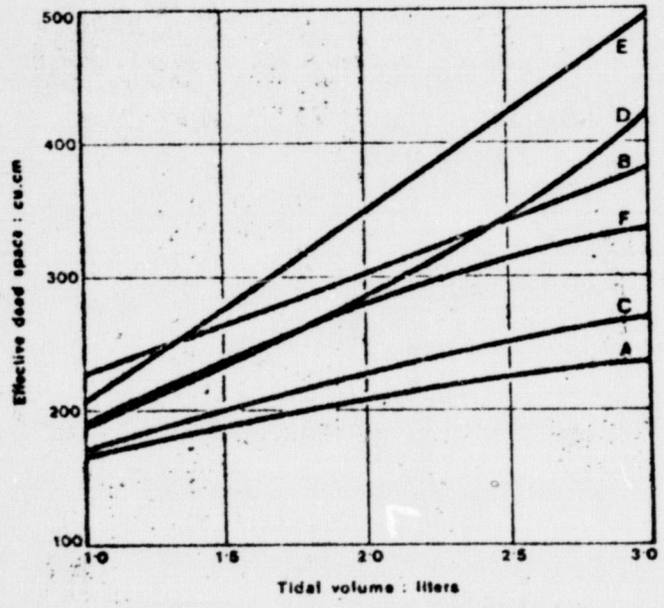

Fig. 4. Effective dead space of six different facemasks

Facemask Dead Space

The term "dead space" when applied to a facemask may mean either the "geometric" dead space, which is the volume between the mask and the wearer's face, or the "effective" dead space, which is a measure of the exhaled breath rebreathed by the wearer. A measure of the geometric dead space can be determined by measuring the volume of water required to fill the space between a mask and a dummy head. Determination of the effective dead space, which is a more realistic measurement, requires a more complicated technique, and may be made as follows. The facepiece, complete with valves and breathing tubes, is fitted onto a dummy head in a leak-tight manner. The expiratory and inspiratory ports of a (two-cylinder) breathing simulator are connected via a T-piece to the dummy head's throat. On expiration the breathing simulator delivers a known mixture of carbon dioxide and air (usually 5 per cent carbon dioxide) into the facepiece and out through the expiration breathing tube to the atmosphere. On inspiration, laboratory air is drawn through the inspiration breathing tube and facepiece into the breathing simulator; part of the inhaled air will thus be supplied from previously exhaled air in the dead space. The inhaled, the exhaled and the laboratory air are analyzed for their carbon dioxide contents. The effective dead space of the facepiece is then given by V $(x - a)/(y - a)$, where V is the vol-

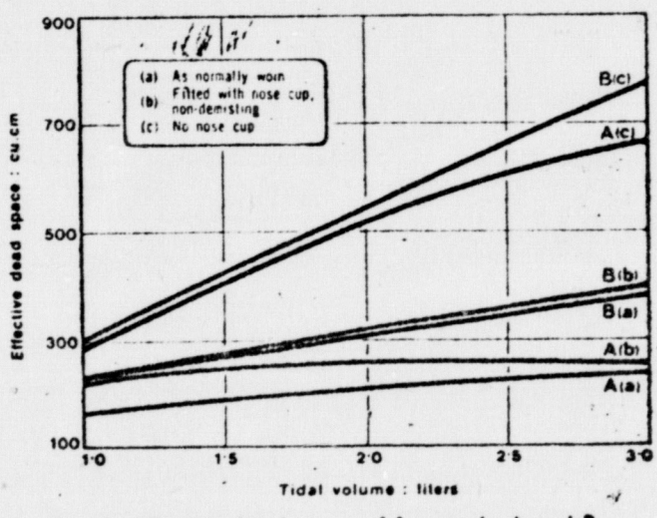

Fig. 5. Effective dead space of facemasks A and B

ume per stroke, the breathing simulator and x, y and a are, respectively, the percentage of carbon dioxide in the inhaled, the exhaled, and the laboratory air. By this means the effective dead space of the facepieces may be measured at different tidal volumes and respiration rates.

This method has been applied to six commercially available facemasks, four of British manufacture, and two Continental. The effective dead spaces were measured at tidal volumes of 1, 2 and 3 liters and at respiration rates of 10, 20 and 30 rpm for each tidal volume. The facemasks used were: —

Mask A. A British pneumatic-seal mask of recent design, fitted with an inner nose cup and a self-demisting arrangement. This arrangement is such that on inhalation aid is drawn through a duct, which directs the air over the surface of the visor before entering the nose cup through non-return valves. The exhaled breath passes direct from the nose cup and out of the exhalation breathing tube.

Mask B. Similar in design to mask A but made by a different British manufacturer.

Mask C. A British pneumatic-seal facemask moulded to the shape of a face and having separate eye lenses, fitted with an inner nose cup and self-demisting arrangement.

Mask D. An earlier wide vision facemask of British manufacture, of the plain-seal type, not fitted with a nose cup or demisting arrangement.

Mask E. A Finnish revert-seal facemask with combined inhalation and exhalation valve, fitted with an inner nose cup and self-demisting arrangement.

Mask F. A German revert-seal facemask fitted with an inner nose cup, but without self-demisting arrangement. The visor is fitted internally with a mechanical wiper blade operated externally by hand for demisting.

Figure 4 shows the effective dead space of all the masks fitted with inhalation and exhalation valves in the as worn condition.

Figure 5 shows the effective dead space of two of the pneumatic-seal types of facemasks (Masks A and B) (a) as normally worn, i.e., demisting, (b) fitted with nose cup but with the demisting arrangement closed and (c) without nose cup.

It was found that the respiration rate at each tidal volume had little effect on the effective dead space (usually less than 5% of the mean); the graphs are a plot of the mean of respirations at each tidal volume.

DISCUSSION—The recent British Standard BS4667:1971 states that the carbon dioxide concentration breathed by the wearer shall not exceed an average of 1%; it follows that to satisfy this requirement the facemask dead space should not be greater than 400 cu.cm at 2 liter tidal volume. Since this concentration in closed-circuit breathing apparatus may include a contribution from the slip of the purifier in addition to the dead space in the complete apparatus, it is recommended that facemask dead space should be less than 300 cu.cm.

The first part of the paper showed that the pneumatic-seal type of facemask is superior to other types as far as face-seal leakage is concerned. This work on dead space has shown that the pneumatic-seal type has a low dead space, particularly when an inner nose cup is fitted. The value of the nose cup is clearly apparent in Figure 5.

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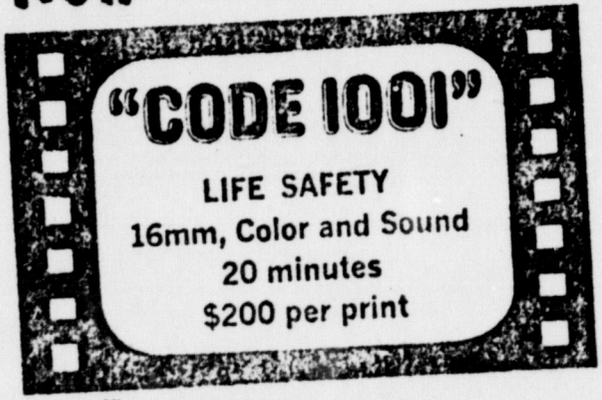

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EXHIBIT - STUDY ENTITLED "EFFECT OF FACIAL HAIR ON RESPIRATOR PERFORMANCE - ANNEXED TO AFFIDAVIT OF ROBERT F. MENDES

Effect of Facial Hair on Respirator Performance

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The effect of facial hair on the performance of half-mask and full-facepiece respirators was measured with quantitative aerosol respirator-man-test systems. Different test subjects having varying degrees of facial stubble, sideburns, and beards were used in the study. Test results showed that the effect of facial hair on the performance of a respirator depends upon the degree to which the hair interferes with the sealing surface of the respirator, the physical characteristics of the facial hair, the type respirator worn in relation to the subject's facial characteristics, and other factors. It is concluded that persons with excessive facial hair such as facial stubble, sideburns, and beards which interfere with the respirator seal, cannot expect to obtain as high a degree of respirator performance as persons who are clean shaven.

Introduction

IT IS OBVIOUS TO EVEN the most casual observer that there has been a pronounced change toward longer male hair styles and toward the wearing of moustaches; wide, long sideburns, and beards. Although this paper is concerned only with the effect of facial hair on respirator performance, the problem of the beard as an occupational hazard is not new. For example, Alexander The Great prohibited his Grecian soldiers from wearing beards because they were too convenient a hand-hold in battle.

The present day consequences of wearing beards are not likely to be as severe as in Alexander's time, but nevertheless a man wearing a respirator can unknowlingly be placed in a hazardous situation if his facial hair interferes with the sealing of the respirator on his face.

In recent years others have investigated the problem of the effect of facial hair on respirator performance. Among them are Hounam[1] and Griffin[2] in the United Kingdom; the U.S. Army[3] and Navy;[4] various fire departments, including the Swedish Fire Defense Agency;[5] and the Atomic Energy Commission. The Los Alamos Scientific Laboratory became involved as part of a much larger project to evaluate all types of respiratory protective devices under simulated work conditions. We have also been investigating other factors that effect respirator performance, such as this very contemporary problem of beards. Our study was limited to the testing of several different types of half-mask and full-facepiece respirators equipped with high-efficiency cartridges.

Work performed under the auspices of the U.S. Atomic Energy Commission.

Experimental Procedure

Quantitative Man-Test Systems

Two types of quantitative man-test systems were used in this study. The quantitative dioctyl phthlate (DOP) aerosol respirator man-test system consisted of a thermal DOP generator that produced a monodisperse 0.3-μm DOP aerosol in a 3 ft by 3 ft by 7 ft high man-test chamber. The amount of facepiece leakage was determined with a forward-light-scattering photometer by sampling continuously from the facepiece at 8 liters per minute (LPM).

The prototype NaCl aerosol respirator man-test system used a Wright Nebulizer to supply a 0.7-μm aerodynamic mass median diameter (AMMD) polydisperse NaCl aerosol to a portable test hood. A continuous sample was taken from the facepiece at 1

LPM and injected into a flame photometer burner.

The results of the tests were displayed on a recorder, and it was possible to determine penetrations on the order of 0.01%.

Types of Respirators Used

Three types of full-facepiece respirators and three types of half-mask respirators were used in this study. All were equipped with high-efficiency particulate filters, which were at least 99.97% efficient against 0.3-μm DOP. This ensured that the observed leakage was primarily at the sealing surface of the mask.

The respirators, shown in Figure 1, have been approved by the U.S. Bureau of Mines. The full-facepiece respirators have been approved for use in atmospheres containing up to 100 times the threshold limit value (TLV) of the contaminant involved, which implies that during a quantitative full-facepiece mask

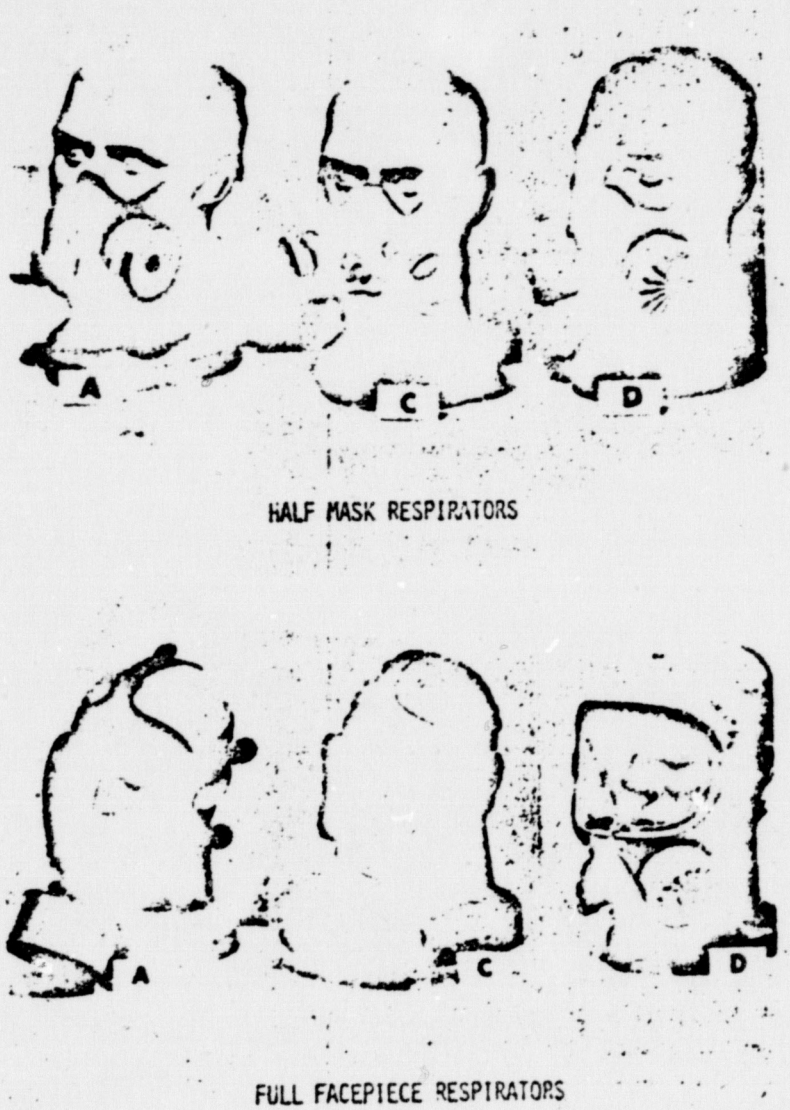

Figure 1. Half-mask and full-facepiece respirators equipped with sampling probes.

test, the maximum penetration should not exceed 1% and the overall average during three tests should not exceed 0.5%. The half-mask respirators have been approved for use at up to 10 times the TLV with proposed allowable penetrations of 10% maximum and 5% average.

Each test respirator was modified by inserting a sample probe at a point where it would not distort the facepiece. These probes can be seen in Figure 1. They were placed below the nose and near the mouth to detect leaks into the breathing zone.

The respirators used in testing the effect of daily stubble growth were arbitrarily chosen by the subjects. The tests on established beards involved three types of half-masks and three types of full-facepiece respirators which represented the range of mask sizes and types of sealing surfaces.

Classification of Beard Types

In an attempt to establish a common language for describing different beard, moustache, and sideburn types, we established the classification system shown in Figure 2. Admittedly, this system falls short of describing all of the large variety of facial hair styles, but it does cover the major categories.

Not all of the hair styles shown will interfere with a respirator. For example, a small moustache, small Van Dyke beard, or short to medium length sideburns probably will not cause difficulty. However, the full, long beards; long, wide sideburns; or handlebar moustaches will most certainly present problems, *if they interfere with the sealing surface of the mask.*

Test Procedures

The standard method of testing during both the DOP and NaCl man tests was for the test subject to put on the respirator, adjust it properly, and then enter the test chamber. The standing subject performed a schedule of exercises. Figure 3 is a reproduction of a typical recording from a man-test on a fully breaded subject. The exercises consisted of normal and deep breathing while sedentary, turning the head from side to side and up and down, normal smiling, reading, coughing, and a final sedentary period dur-

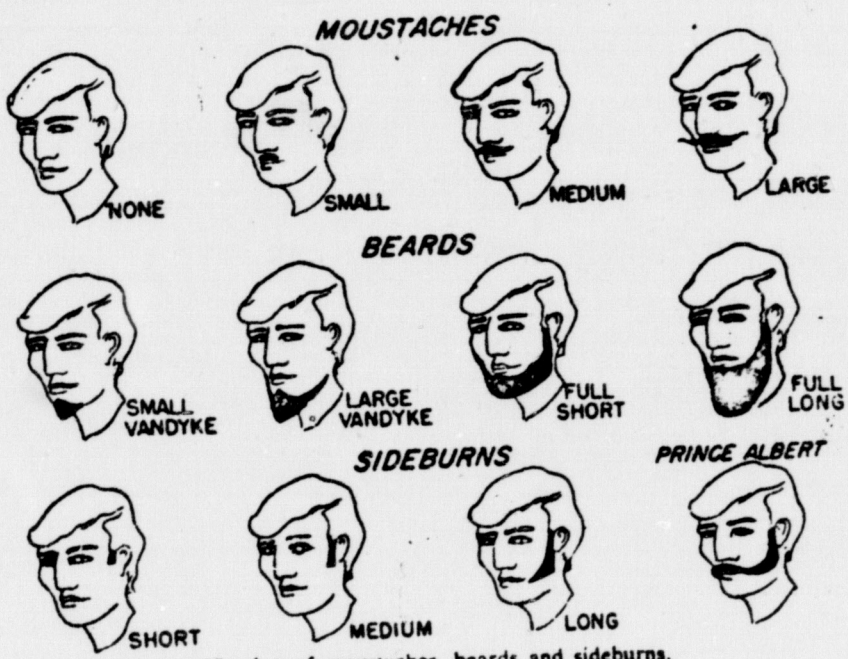

Figure 2. Classification of moustaches, beards and sideburns.

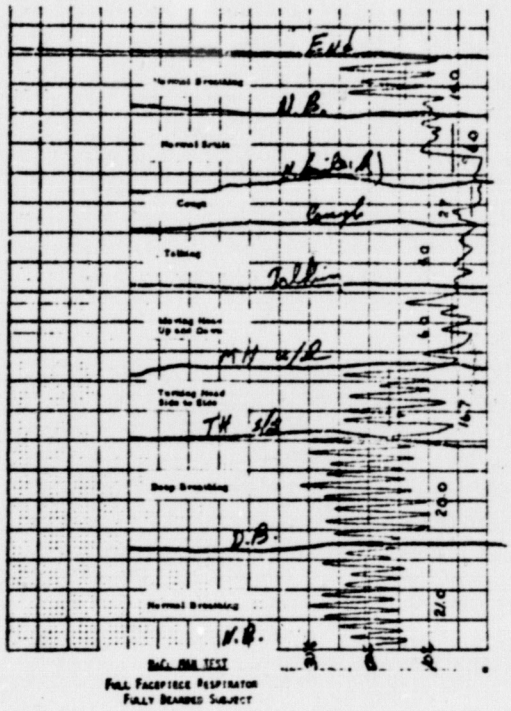

Figure 3. Typical recording from a man-test on a fully bearded subject.

ing which the penetration was compared with the initial sedentary penetration.

The average penetration observed during each test exercise was determined from the recording, and these interim averages were then used to determine the overall average penetration during the complete test. Although it is not indicated on this particular recording, we determined the maximum average penetration observed during any one test exercise (approximately 27% during deep breathing). The significance of these penetrations relates to the maximum penetrations of 10% with half-masks and 1% with full-face-piece respirators imposed by the Bureau of Mines approval schedules under which these respirators were approved.

Of interest in this particular test were the exceedingly high initial sedentary penetrations (~20%), which with this full-facepiece respirator were far in excess of the 1% allowable maximum. Furthermore, the respirator appeared to seal better when the subject started moving his head up and down, indicating that the respirator was working its way into his beard. However, this was a temporary improvement as is indicated by the 14% penetration during the final sedentary period.

In this study, two types of investigations were undertaken. The first examined day-to-day deterioration in the facial seal caused by increasing facial hair growth. This investigation used the 0.3-μm DOP aerosol. As high leakages were expected, the DOP exposure was limited by requiring the subject to perform normal and deep breathing exercises only.

The second type of investigation, performed on subjects with established facial hair, used a 0.7-μm NaCl aerosol. These subjects performed the full schedule of exercises.

Results

Effect of Day-to-Day Beard Growth

Most individuals normally remain clean shaven or else have an established beard. However in military service a man may have to go several days without shaving, so the effect of day-to-day beard growth can become important. As part of an overall evaluation of respirator performance against NaCl, Hounam, in 1964 investigated the effect of daily beard growth on a British military full-facepiece respirator.[1] We performed a similar study, using 0.3-μm DOP, on four initially clean shaven subjects who were tested for 7 to 8 days using a selection of half-masks and full-facepiece respirators while their stubble grew.

A comparison of Hounam's data on the day-to-day variation in respirator efficiency due to beard growth and our data on two full-facepieces is shown in Figure 4. Note the order of magnitude increase in penetration within the first few days. This corresponds with previous military data which showed that the maximum penetration occurred in 3 days.[3] We found this to be true in our study also, although we noted a general overall increase in penetration beyond

EXHIBIT - STUDY ENTITLED "EFFECT OF FACIAL HAIR ON RESPIRATOR PERFORMANCE - ANNEXED TO AFFIDAVIT OF ROBERT F. MENDES

the 3 day period. After the initial deterioration of the fit, the penetrations showed large day-to-day variations. This is illustrated by Hounam's data at 4 days and by our data on full-facepiece A at 7 days.

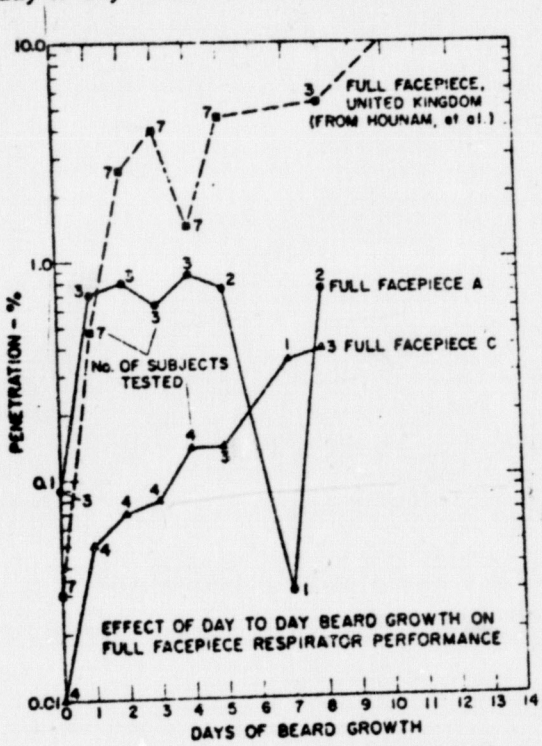

Figure 4. Effect of day-to-day beard growth on respirator performance.

In contrast, the penetrations of full-facepiece C showed comparatively less increase in the first 2-3 days and a general increase thereafter, until at the end of the 8-day period the penetrations were comparable with those of full-facepiece A. These comparisons were made to illustrate the effect of daily growth of stubble only. The differences in actual penetrations observed on a given day are not important as we used different aerosols, test systems, test respirators, and test subjects.

Effect of Established Facial Hair

Table I is a summary of the average NaCl penetrations obtained on 12 test subjects who wore varying types of full beards and Van Dyke beards. Table II summarizes the test results on 4 subjects who had sideburns wide enough to interfere with the sealing surfaces of respirators. As a group, these people were inexperienced in wearing respirators. Therefore, we made every effort to assist them in obtaining the best possible seal, including positioning the mask on the face and adjusting strap tension.

TABLE I
NaCl Man-Test Results on Bearded Test Subjects

Subject No.–Initial	Average NaCl Penetration, %						Hair Characteristics		
	Half-Masks			Full-Face Masks					
	A	C	D	A	C	D	Growth	Texture	Length (inches)
	Full Beard								
1–GF	22.5	19.0	12.4	11.4	1.6	7.5	Average	Wiry	2–2½
2–JS	—[a]	17.1	14.3	10.3	15.9	12.9	Average	Coarse	¾–1¼
3–AB	15.1	10.4	10.9	13.3	6.6	—	—	—	—
4–WK	7.7	12.8	11.3	15.9	4.2	1.3	Average	Coarse	1⅜–1¾
5–RS	4.4	8.1	13.8	8.9	11.9	4.1	Average	Fine	¾–1
6–MH	5.3	1.8	7.8	1.6	1.1	0.4	—	—	—
7–JB	0.98	0.19	4.8	0.7	0.03	<0.01	Sparse	Fine	2½–3¾
8–EG	0.4	0.03	2.4	3.3	0.02	0.03	Sparse	Fine	1–1¼
9–JB	3.5	7.3	16.3	5.5	0.6	1.9	Average	Average	¾
10–WB	2.2	7.7	10.9	12.7	11.3	10.9	Average	Average	½–1
11–RM	1.2	3.3	6.2	2.6	3.3	3.8	Dense	Coarse	½–⅜
	Van Dyke Beard								
12–DL	9.3	7.0	—[b]	0.17	<0.01	<0.01	Dense	Coarse	2

[a]Mask could not be fitted.
[b]Beard block inhalation valves.

Although the results are not tabulated, we examined at what point during the test the maximum average NaCl penetrations occurred. We noted that most of the maximum leakages occurred during head movements or in some cases at the beginning of the test before the respirator had a chance to work its way into the facial hair. With the half-masks, a substantial number of maximums occurred during similing, a tendency that has been observed on clean shaven individuals. These leakages therefore could not be attributed directly to the beard. However, we felt that the number of maximums occurring during normal and deep-breathing exercises at the beginning of the test were a direct result of the beard. Figure 3 is a good illustration of this effect.

Following are NaCl man-test results selected from Table I (beards) and Table II (sideburns) to illustrate the effects found to be typical of most tests. We tried to explain these effects from the standpoint of the relationship between the facepiece design and the various beard parameters such as length, texture, and extent.

Subject 1, (Table I), was the extreme of all of the subjects tested. He had a very full, essentially untrimmed 2-2½ inches long, wiry beard that extended well back under his chin and was long at the jaw line. The beard extended beyond the inner and outer limits of all of the respirators. From the test results it is obvious that only with full-facepiece C could this subject obtain anything approaching an adequate seal. Even this lowest penetration exceeded the 0.5% average specified for a full-facepiece respirator. As a practical matter, it would be imprudent to expect adequate protection if a full-facepiece is worn over a beard of this size.

Subject 5, (Table I), had a much shorter, finer textured, full beard shaped so that it was prominent only in the chin area and along the jaw line. The beard on the chin was about 1 inch long shortening to ¾ inch along the jaw line and sideburns. It also extended back underneath the chin. The NaCl penetrations were lower than those for the preceding subject, except with full-facepiece C and half-mask D, the widest of the three masks. Most men have sparse facial hair in the area along the jaw line where most half-masks seal, but mask D extended beyond that area into a region where the growth is normally heavier, with resulting higher penetrations. Penetrations of half-mask A were within the specified limits of the 5% average. This mask has a flat outer seal that contacts the cheeks with a relatively sharp edge and also has an inner flap that lies flat against the face and blends into a chin cup. It is possible that the lower penetrations for this subject are because the outer sharp sealing edge worked its way down into the comparatively sparse growth, thereby providing a seal.

Subject 7, (Table I), had a beard similar to Subject 5's, but longer and sparser. He obtained satisfactory seals with all of the test

TABLE II

NaCl Man-Test Results on Bearded Test Subjects

Subject No.-Initial	Average NaCl Penetrations, % Half-Masks A	C	D	Full-Face Masks A	C	D	Hair Characteristics Growth	Texture
	Van Dyke Beard and Sideburns							
13-LG	2.7	0.75	7.0	1.3	0.22	0.38	Average[a]	Coarse
14-AM	<0.01	0.03	2.2	—	—	—	Average	Average
	Sideburns							
15-GW	—	—	—	0.69	<0.01	<0.01	Average	Average
16-MG	—	—	—	0.01	0.43	0.03	Average	Average

[a] 1-1¾ inches long.

respirators except full-facepiece A, where the NaCl penetration exceeded the 0.5% allowable. In contrast to the other two full-facepieces, full-facepiece A has a continuous flat seal that apparently is more susceptible to leakage when worn over a beard, as can be seen by examination of the average leakages on other subjects. With exceptions, the penetrations were higher than on the other two full-facepieces.

If a Van Dyke beard is small enough, it can be tucked into the chin cup of a full-facepiece respirator, but this is generally not possible with the half-masks because the chin cups are too small. The results on Subject 12 (Table I) illustrate this effect. He was able to obtain a good seal, with some difficulty, using the three full-facepiece respirators. His Van Dyke beard was 2 inches long and cut square instead of pointed. He was unable to obtain a decent seal with any of the half-masks, and his beard blocked the operation of the inhalation valves of mask D holding them closed. Needless to say, the test was quickly terminated at the subject's request.

Subject 13 (Table II) also had a Van Dyke beard, as well as wide sideburns. His beard was of the more conventional pointed type and was not as dense as the preceding subject's nor quite as long. He obtained a satisfactory fit with all masks except the wide half-mask D, which interfered with his sideburns, and full-facepiece A. His results with full-facepieces C and D were higher than Subject 12's, but this could possibly be due to differences in facial dimensions that, although not considered in this study, are an important aspect in fitting respirators on clean shaven individuals. Subject 13 did have an unusual facial structure.

The final facial hair type to be considered was the wide sideburn. Subject 14 (Table II), had very wide, long sideburns extending well in toward the corners of his mouth. He was tested using the half-masks only, and the results indicate that he was able to obtain a satisfactory fit on half-masks A and C but not D. The comparatively narrow half-masks A and C sealed inside the area covered by his sideburns, but the wider mask D extended into this area. Although the observed penetrations were within the 5% average penetration limit, unless this subject was careful to keep the length of his sideburns and the skin area they covered constant, there would be no guarantee that these results could be repeated over any extended period, particularly using half-mask D.

Subject 15's sideburns (Table II) were somewhat narrower than the preceding subject's, and we predetermined that the half-masks would fit inside the limits of the hair. Using full-facepieces C and D, which have a narrow inner seal and a flat outer seal to which the headharness is attached, he obtained a good fit. However, using full-facepiece A, he exceeded the 0.5% allowable average penetration.

Finally, Subject 16 (Table II), also had very wide sideburns, but they were far enough from the corners of his mouth that they did not interfere with the half-masks. He also obtained adequate seals with the three full-facepiece respirators, even mask A, which illustrates the dangers of generalizing about the effect of facial hair on the performance of respirators.

Conclusions

The results of this preliminary study have led to the general conclusion that beards and wide sideburns do detrimentally affect the performance of half-mask and full-facepiece respirators. Agencies charged with the responsibility of establishing criteria for proper respiratory protection of the working population have recognized this fact, as the 1970 Occupational Safety and Health Act[6] states, in part, that "Respirators shall not be worn when conditions prevent a good face seal. Such conditions may be a growth of *beard, sideburns, etc.*" (Author's emphasis). All AEC facilities are now requiring their employees to be clean shaven to the point that there is no possible interference with

the sealing surfaces of the respirators they wear. Many fire departments have the same requirement, and the U.S. Navy will not endorse the wearing of respirators other than positive pressure self-contained breathing apparatus by bearded personnel in an atmosphere immediately hazardous to life.

Our specific conclusions from this study are:

1. Persons with excessive facial hair such as facial stubble, beards, and wide sideburns that interfere with the respirator seal, cannot expect to obtain as high a degree of respirator performance as clean shaven individuals.

2. The exact degree to which a particular beard or sideburns affects a specific person-respirator combination depends on many factors such as the length, texture, and density of hair as well as the extent of the interference with the sealing surface of the respirator.

3. Short of almost continuous surveillance of the respirator fit on a bearded worker by use of some means of qualitative or quantitative fitting, the only safe and prudent approach is to require that the facial hair not interfere with the respirator sealing surface, or to require that the individual not work in an area or at a task that requires respiratory protection.

As a final note, this study was done at the request of many individuals who are increasingly coming into contact with this problem. Our results and conclusions have been given in the spirit of objective comment, not of social criticism.

References

1. Hounam, R. F., *et al.*: The Evaluation of Protection Provided by Respirators. *Annals of Occup. Hyg.* 7: 353-363, Pergamon Press 1964.
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3. Goldberg, M. N., *et al.*: Individual Respiratory Protection Against Chemical and Biological Agents. *Eighth Quarterly Progress Report*, July: 46. Physical Protection Laboratory, Defense Development and Engineering Laboratories, Edgewood Arsenal, Md. (1966).
4. *Bioenvironmental Safety Newsletter*. Life Sciences Department, Naval Safety Center, 2nd Quarter (1971).
5. Persson, G.: Alarming Figures. *Brandförsvar (Fire Defense)*, May, Sweden (1971).
6. Occupational Safety and Health Standards. Code of Federal Regulations, Title 29, Chapter XVII, Part 1910, Subpart I, par. 1910.134, *Federal Register* Sec. e(5)(i) 37:22232 (Oct. 18, 1972).

Received September 18, 1972

Hearing Conservation Guide for Minerals Industry

Guidelines to aid the minerals industries in protecting the hearing of employees have been published by the Bureau of Mines. The report is intended to help operators of mines and mills set up programs to protect workers from hearing loss. About half of the report is devoted to discussion of a comprehensive hearing conservation program. Appendixes provide data on commercially available ear protection devices, list equipment suppliers, and recommend additional references.

A free copy of the Report can be obtained from Publications Distribution Section, Bureau of Mines, 4800 Forbes Avenue, Pittsburgh, Pa. 15213. Request should identify the report as *Hearing Conservation for the Mineral Industry* Information Circular 8564.

EXHIBIT - LETTER DATED JUNE 3, 1974 - ANNEXED TO AFFIDAVIT OF ROBERT F. MENDES

UNIFORMED FIREFIGHTERS ASSOCIATION
OF GREATER NEW YORK
225 Broadway, New York, N. Y., 10007
Telephone: BEekman 3-4234
U.F.A. Security Benefit Fund Telephone: 267-7820
LOCAL UNION NO. 94

June 3, 1974

Dear Sirs & Brothers:

Re: Hair & Beards

The Fire Commissioner has promulgated a department directive on hair and beards as a safety factor. Although we are opposed to this directive, I have directed our attorney to legally pursue and research the right of the Commissioner to issue such a ruling.

Our attorney, Edward Edenbaum, has submitted the following opinion:

> "After careful research of the cases in the Supreme Court, the Appellate Division and the Court of Appeals of the State of New York, it is my considered opinion that where there is a reasonable relation between the safety factor of the position of firefighters and the directive of the Fire Commissioner, the Courts will sustain the Fire Commissioner's restriction on Beards, sideburns, Hair and Moustaches. Therefore, for the UFA to pursue this matter in the Courts to void the Commissioner's ruling, would not be successful and the Commissioner's ruling would be upheld by the Courts.
>
> (signed) Edward M. Edenbaum
> Attorney-at-Law"

EXHIBIT - LETTER DATED JUNE 3, 1974 - ANNEXED TO AFFIDAVIT OF ROBERT F. MENDES

The Executive Board directs the members to abide by the opinion of our attorney.

Fraternally,

s/ Richard J. Vizzini

RICHARD J. VIZZINI
President

JOHN J. O'SULLIVAN
Fin. & Rec. Secy.

RJV:jmd
jjos

NOTICE OF MOTION TO AMEND
THE ORDER TO SHOW CAUSE

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

NEIL KAMERLING, RICHARD CANTELLO,
EDWARD MORAN, JAMES J. SEABARKROB,
JOSEPH J. ANASTASIO,

Plaintiffs,

-against-

JAMES T. O'HAGAN, Fire Commissioner,
City of New York,

Defendant.

S I R S :

PLEASE TAKE NOTICE that upon the annexed affidavit of JOSEPH J. ANASTASIO, duly sworn to on the 17th day of July, 1974, the undersigned will move this Court before the Hon. Mark A. Costantino, at Courtroom 1, Second Floor, United States Courthouse, 225 Cadman Plaza East, Brooklyn, New York, on the 23rd day of July, 1974 at 10:00 a.m. in the forenoon of that day or as soon thereafter as counsel can be heard for an Order amending our Order To Show Cause signed by Judge Mark A. Costantino on July 17, 1974 by adding the name of Joseph J. Anastasio and deleting the name of Harry F. Rowe and for such other

NOTICE OF MOTION TO AMEND
THE ORDER TO SHOW CAUSE

and further relief as to this Court may seem just and proper.

Dated: Smithtown, New York
July 23, 1974

Yours, etc.,

MEYER & WEXLER, ESQS.
Attorney for Plaintiffs
Office & Post Office Address
28 Manor Road
Smithtown, New York 11787
516-265-4500

BY: s/
Richard T. Haefeli, Esq.

AFFIDAVIT OF JOSEPH J. ANASTASIO
IN SUPPORT OF MOTION TO AMEND

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

[SAME TITLE]

STATE OF NEW YORK)
) SS.:
COUNTY OF QUEENS)

JOSEPH J. ANASTASIO, being duly sworn, deposes and says:

1. That your deponent resides at 102-00 Shore Front Parkway, Rockaway Park, New York.

2. That your deponent has been a member of the New York City Fire Department and employee of the City of New York for four years.

3. That the defendant is the Fire Commissioner of the City of New York, a municipal corporation.

4. That on July 1st, 1974, the defendant issued regulation PA/ID6-74 effective July 8th, 1974, establishing grooming standards for members of the Fire Department of the City of New York. (Annexed hereto, made a part hereof and marked Exhibit "A" is a true and exact copy of said regulation.)

5. That prior to July 1st, 1974, the grooming standard in effect for the New York City

Fire Department only required an individual fireman's hair to be neat and trimmed.

6. That the aforementioned regulation PA/ID6-74 issued July 1st, 1974, by its own terms was based upon the following:

(a) It is impossible to obtain a satisfactory seal with a face mask on a bearded man.

(b) Flowing hair is more readily ignited and hair excessive to any degree, acts as an insulator.

(c) Exposed hair is a breeding place for germs, and that lacerations occurring on hair covered surfaces subject said injury to infection and complicate the injury and extend the time for recuperation from said injury.

7. That said regulation states in part:

(a) Hair on top of the head shall not be excessive in length at any point and that hair at the back of the neck shall not extend below the shirt collar.

(b) Mustaches are not permitted to extend beyond the corners of the mouth nor below any portion of the upper lip.

(c) Beards or goatees are not permitted.

(d) Side burns shall be neatly trimmed close to the face and shall not extend below the lower extremity of the ear.

8. That the regulations provide further that an inspecting officer may order a fireman to correct a violation if in such inspecting officers opinion such violation might impair the full effectiveness of the face mask.

9. Subsequent to July 1, 1974, disciplinary proceedings to be followed for a violation of the aforementioned regulation were issued by the defendant and provided for the dismissal of any fireman who failed to comply with the regulation. (Annexed hereto, made a part hereof and marked Exhibit "B" is a true and exact copy of said letter procedure).

10. That your deponent presently has and has had for at least one year prior to July 1, 1974, a full beard and hair that does not comply with the aforementioned regulation. All of same being in violation of the aforementioned regulation.

11. That your deponent was advised upon returning from vacation on July 7th, 1974 that the aforementioned grooming regulation was to go into

effect on July 8th, 1974. That on your deponent's next tour of duty on July 11th, 1974, your deponent was advised t hat he was in violation of the aforementioned regulation, that he had two tours to correct same and that until he corrected same he was relieved masked duty, i.e. your deponent could not wear a mask. That on July 11th, 1974, your deponent responded to a fire which was in its second alarm, three floors of the building had already been destroyed by fire, there was heavy smoke and it was semi-occupied. In such a situation your deponent would normally use a face mask, but could not do so. Eleven firemen were injured including your deponent who was overcome by smoke, could not see, began to regurgitate, and fell backwards down stairs. As a result your deponent injured his back and left knee and will return to work on July 23rd, 1974 at 6:00 p.m. Your deponent was advised by telephone on July 22nd, 1974, that he would be suspended from the Fire Department if he did not comply before returning to work.

12. That in none of said instances when your deponent was required to put on a face mask to protect himself against smoke, noxious and poisonous

gases did your deponent suffer any adverse effects as a result of being exposed to said foreign substances since in each case your deponent obtained a proper seal with the face mask.

13. That in addition, Fire Department regulations as set forth in Training Bulletin, Mask 1, issued March 19th, 1966, require firemen at the Weekly Muti-Unit drill to put on the face mask and obtain a proper seal. Your deponent has undergone numerous such tests and has always obtained a proper seal and has never failed said test. (Annexed hereto, made a part hereof and marked Exhibit "C" is a true and exact copy of said Bulletin).

14. That it is your deponent's desire to adopt a grooming standard personal to himself which said standard would be in violation of the aforementioned regulation issued by the defendant, but to do so at the present time would subject your deponent to dismissal from his position.

15. That your deponent respectfully submits that the aforementioned regulation and enforcement thereof is a violation of your deponent's personal liberty and constitutional rights as provided for in

the First and Fourteenth Amendments to the United States Constitution, in that it imposes a purposeless restraint on your deponent's Constitutional rights, and further that said regulation having been adopted, upon information and belief, without a public hearing to establish its necessity violates your deponent's rights to due process.

16. That a civil action against the defendant has been instituted and amended to include your deponent as a plaintiff and deleting HARRY F. ROWE as a plaintiff.

17. That in view of the fact that HARRY F. ROWE did not sign the affidavit in support of the Order to Show Cause as well as the fact that your deponent is now being threatened with dismissal, your deponent respectfully requests that in addition to the original relief requested the Order to Show Cause be amended to delete HARRY F. ROWE and include your deponent as a plaintiff.

WHEREFORE, your deponent respectfully requests that the within application be in all respects granted.

s/_____
Joseph J. Anastasio

[Duly sworn to
July 23, 1974]

AMENDED COMPLAINT

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

[SAME TITLE]

I - JURISDICTION

1. The jurisdiction of this Court is found upon the existence of a Federal question.

2. This action arises under the First and Fourteenth Amendments to the Constitution of the United States. This is an action for a declaratory judgment and permanent injunction to prevent the further deprivation of the plaintiffs constitutional rights of free expression, due process and equal protection as provided for in the First and Fourteenth Amendments to the Constitution of the United States.

II - PARTIES

3. The plaintiffs are employees of the City of New York, members of the New York City Fire Department, all reside in the State of New York and in the Counties of Queens, Suffolk, Nassau, Richmond and Putnam.

4. The defendant is the Fire Commissioner

of the City of New York, a municipal corporation, charged with the responsibility of providing fire protection for the residents of the City of New York.

III - INCIDENTS AT ISSUE

5. On July 1, 1974 the defendant issued Regulation PA/ID6-74 which became effective on 7/8/74 and which said Regulation prescribed grooming standards for members of the New York City Fire Department.

6. That said Regulation provides standards for length of hair, sideburns, mustaches and prevents the wearing of beards and goatees. (Annexed hereto, made a part hereof and marked Exhibit "A" is a true and exact copy of said Regulation).

7. That subsequent to the adoption of said Regulation, the defendant adopted disciplinary procedures to be followed in the event of a violation of said Regulation. That said procedures provides for a trial to be held with respect to any member of the Fire Department in violation of said Regulation and the punishment to be imposed with respect to any fireman in violation of said Regulation as of the date of trial being dismissal from the Fire Department

of the City of New York. (Annexed hereto, made a part hereof and marked Exhibit "B" is a true and exact copy of said procedure).

8. That all of the plaintiffs prior to the adoption of the aforementioned Regulation had adopted personal grooming standards which standards were in violation of said Regulation and the plaintiffs have been threatened with dismissal for being in violation of said Regulation.

IV - CAUSE OF ACTION

9. The aforementioned Regulation regarding the personal grooming standards of members of the New York City Fire Department is a violation of the plaintiffs constitutional rights of free expression, due process, equal protection and personal liberties as provided for in the First and Fourteenth Amendments to the United States Constitution in that said Regulation is arbitrary, capricious, vague and furnishes a substantial restraint upon the plaintiffs aforementioned rights without their being any rational basis for said Regulation and that said Regulation was adopted without a public hearing in violation of the plaintiffs constitutional rights of due process.

10. That the plaintiffs are now suffering and continue to suffer irreparable injury as a result of the enforcement of the aforementioned Regulation.

11. That the plaintiffs have no plain, adequate or complete remedy at law to redress the violaiton of thier constitutional rights, and this suit for a declaratory judgment and permanent injunction is the only means of securing complete and adequate relief for the plaintiffs.

WHEREFORE, plaintiffs pray that this Court:

(a) Declare the aforementioned Regulation as being illegal, vague and in violation of the plaintiffs constitutional rights and a restriction on the plaintiffs personal freedoms.

(b) Declare that the plaintiffs be permitted to adopt a mode of personal grooming of their choice.

(c) Grant the plaintiffs a permanent injunction, ordering the defendant, his agents, servants and/or employees and all persons in active concert with him from enforcing the aforementioned grooming Regulation.

(d) Order the defendant to remove from the personnel file of each of the plaintiffs any and all references presently contained therein with respect to the violation of the aforementioned grooming standard.

(e) Grant such other and further relief as to this Court may seem just and proper.

Respectfully submitted,

MEYER & WEXLER, ESQS.

By: _____
Richard T. Haefeli, Esq.
Attorneys for Plaintiffs
Office & P. O. Address
28 Manor Road
Smithtown, New York 11787
(516) 265-4500

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF NEW YORK

KARMERLING, et al., Plaintiffs, - against - O'HAGAN, FIRE COMMISSIONER OF NEW YORK CITY, Defendant.	74C 1061

United States Courthouse
Brooklyn, New York

July 23, 1974

B e f o r e :

HONORABLE MARK A. COSTANTINO, U.S.D.J.

MICHAEL J. MIELE, C.S.R.
OFFICIAL COURT REPORTER, U.S.D.C., E.D.N.Y.

Appearances:

MEYER & WEXLER, ESQS.
29 Manor Road
Smithtown, New York
Attorneys for Plaintiffs
BY: LEONARD D. WEXLER, ESQ.
Of Counsel

ADRIAN P. BURKE, ESQ.
Corporation Counsel for New York City

BY: ROSE MARIE CARROLL, ESQ.

THE COURT: All right.

MR. WEXLER: Your Honor, the argument is basically that the petitioners are members of the New York City Fire Department. We feel they have a constitutional right to have their hair grooming, provided it doesn't interfere with a legitimate state interest, as they desire.

The need of the order to show cause is that they have been told they would be suspended if they violated the order that came out July 1, 1974.

I call the Court's attention to the fact that basically there were no hair regulations for the Fire Department prior to July 1, 1974, and these petitioners have been members of the Department for many years.

I further call to the Court's attention that these men are tested periodically. The main thrust is that the gas mask, the growth of the hair interferes with the gas mask. These men are tested periodically. They have a gas tower where they are sent to and not one of the petitioners, or anyone that they know of, or anyone that I know of, has failed to receive a satisfactory seal with the hair or beards.

I realize as part of the answering affidavits and answer are reports, scientific reports. I except

to all of them on the ground that -- and I have read some of them -- the mask used by the Fire Department, the Scotch mask, the demand type 6000, I don't believe was tested or is a part of any of the statistics that have been offered here. There is no proof as to that.

There is no proof as to how long or what purpose they were used for. I realize the defendant is relying heavily on the NASA report from Las Alamos, and I have a copy of that, and there again they are not talking about the length required of hair for wearing a gas mask, the degree of efficiency required for ordinary firemen; there is just nothing in the report concerning that.

The report goes on to say that it could affect some and it could not affect others, and the only way to tell is to test.

We are claiming that we are entitled to this preliminary injunction on the ground that all these reports existed before 1974; the men worked under those conditions before July 1, '74, and this magic number of July 1, '74 is not entitled to take away their constitutional rights.

THE COURT: You agree that the regulation was made not for the purpose of controlling the appearance of some person, but rather on the question of safety.

If that affects that person or someone else, there is cause for this Court to listen to testimoney to determine whether or not there is reason to effectuate such a regulation.

MR. WEXLER: Yes. My only argument is the stay should be in effect until there is proof offered to this Court, because it existed for fifteen, twenty years before the reports known prior, and no incident of hurt or ill effect to any individual has been noted.

THE COURT: In any event, though, it seems that it is the type matter that should be heard immediately, and rather than a temporary injunction should issue, a permanent one should issue or it should be dismissed as to whether the regulations are proper in the first instance, and this Court was prepared after 11:00 o'clock this morning to hear testimony on the basis of the proceeding that has been brought before it.

If you are ready to go we will do so, rather than argue on the motion. I don't think the argument on the motion is going to enlighten the Court one bit other than what the papers have already said.

You probably realize I am familiar with the background law of the long-hair cases, and that is not going to affect my judgment. My judgment will be affected by what I hear from the witness stand as to

safety probabilities, No. 1, and as to whether or not it is an arbitrary, capricious type of regulation as to controlling of grooming and appearance in violation of the right of an individual, and this Court will make a determination on the basis of what testimony comes before it.

MS. CARROLL: If I may be heard on that point. Several other district courts have examined essentially the same regulations based on the same studies that are the basis for the regulations adopted by the Fire Commissioner herein.

Those courts have held principally that an arrogation by a plaintiff that they are able to effect a satisfactory seal in the presence of hair that is violative of regulations totally misses the point.

THE COURT: I understand that. I am not disagreeing with that position at all that you are taking at this point. It's not what the plaintiffs say would affect them, it is what the experts would say as to the conditions of the mask and whether or not there is a possibility of causing a hazard either to themselves or someone else, and that is what I want to hear.

MS. CARROLL: I was not directing myself to that. I was directing myself to the plaintiff's contention that they can effect satisfactory safety conditions with

the presence of hair. I am saying that it is the right of the Fire Department to effect maximum safety, and clearly the plaintiffs are not --

THE COURT: That is not totally true because each one of those cases bases its opinion on something that came before it, where there was some factual basis for the opinion. The factual basis for the opinion is what some other judge said in some other court, and that will not affect this court. I must have what I call concrete proof.

If the proof is that there is a possibility of the mask not being sufficient because of the condition of the beard on the face of the individual, then there is a safety hazard, there is no condition about it. But if the proof is otherwise, then of course the Court would have to rule otherwise.

MS. CARROLL: With respect to the offer of proof and the affidavits that have been submitted, the plaintiffs have not shown any possibility of success on the merits with respect to this.

THE COURT: I don't understand your opposition to having a complete trial, which is what we should have rather than for this Court to decide this motion on the papers. The papers are not sufficient. The papers state something rather than the testimony of the people

that I would hear from the witness stand.

MS. CARROLL: I conclude that you have determined that we will have a hearing today.

THE COURT: Yes. I think injunctive relief is very serious relief and once given it must be denied or granted, but it is very serious in its initial stage and it will affect the regulation or not affect the regulation, either way.

Are you prepared for a hearing?

MS. CARROLL: I believe so, your Honor. With respect to getting all our witnesses here today, after I present some of the case, I may need an adjournment which I would request at that time.

THE COURT: We can continue tomorrow. There is no problem. It will be about 11:30. Get your witnesses ready.

(Recess)

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THE COURT: Civil motion, Kamerling et al versus O'Hagan.

Let's proceed.

MS. CARROLL: Your Honor, preliminarily, I would like to voice the objection of the defendants to the notice of motion we received in Court today at 10:30 adding a new party plaintiff to the action, Joseph J. Anestasio.

The reason for our objection is that there are allegations in the affidavit with respect to alleged violations to the temporary restraining order that was initially ordered by the Court, and inasmuch as Mr. Anestasio was not a party at the time of the issuing of the TRO, the allegations in the complaint are really not referable to the action before your Honor.

Furthermore, inasmuch as this is an application for a preliminary injunction, immediacy is of the essence. It is unfair to burden the defendants in court with allegations with respect to a particular plaintiff when they were not previously notified of that.

THE COURT: In any event, this is going to be a preliminary and permanent injunction that we are going to try right now; we are going to try

the both of them together, so it doesn't make much difference.

MS. CARROLL: It makes a considerable difference to the defendants, your Honor.

THE COURT: I will reserve on your motion until the end.

MS. CARROLL: Thank you.

It has been agreed by counsel for the plaintiff that I will call my witnesses first.

THE COURT: YEs, you should.

MS. CARROLL: I would like to call James T. O'Hagan.

THE COURT: John T. --

MS. CARROLL: John T. O'Hagan.

All right.

J O H N T. O' H A G A N, called as a witness, was first duly sworn by the Clerk of the Court and testified as follows:

DIRECT EXAMINATION

BY MS. CARROLL:

Q Mr. O'Hagan, can you tell us what is your present position in the Fire Department?

A I am the Fire Commissioner and Chief of the Department.

Q And how long have you held that position?

A I have been a Fire Commissioner for approximately 10

months. I have been the Chief of Department for almost 10 years.

Q Can you tell us what other positions you have held in the Fire Department which would give you experience in the area of fire safety and fire safety devices?

A Well, I entered the Fire Department as a probationary fireman and I have come up through the career rank, through promotion and examinations.

As far as the matter at hand, the use of masks, as a fireman in 1951 and '52, I worked in one of the four companies, rescue companies, which were the only companies using masks. I have been using masks and have been interested in masks ever since.

I was an instructor in the Fire College in the use of masks for several years. I was the Captain of Rescue 1, which has probably done more mask work than any other company in the Fire Department, and for the past four years, I have been a member of the User Design Committee working with the National Aeronautic and Space Agency in designing and developing an improved life support system for fire fighters.

Q The Fire Department has adopted regulations with respect to grooming, which is the subject of the plaintiff's challenge herein.

Can you tell us the background for the adoption by the Department of these regulations?

A First of all, I would take exception to the nature -- it is not involving grooming, they involve safety.

Q Health and safety standards.

A The background of the adoption -- the Department, through intercourse with other departments in the United States and through my participation through the NASA program, has been aware for some time there is a question about the effectiveness of the seal you can obtain with a mask, with a face piece when you have growth of hair on your face and head.

There is also a question regarding the ability of the body to dissipate the heat generated in our particular activity extinguishing fires in highly heated areas.

We depend on the evaporation of perspiration to reduce body temperature. If you put an insulating blanket of hair on some of these few surfaces that you have exposed, you cut down on that rate of evaporation and you increase the rate of temperature buildup in the body.

Q Can you tell the Court which device you are in fact talking about, the mask that is used?

A I thought we were talking about the regulation, the safety and health regulations for the standards regarding

hair and beards in the Fire Department.

Q Yes, but I would like you to also tell us the type of mask that is presently being used by the Fire Department.

A The mask used in the New York Fire Department is the Scot Airpack. It works on a pressurized container that has a demand regulator on it and a face piece that fits the face, and as you require air you inhale and the valve gives you as much air as you require and you breathe in and help.

Q So then these regulations were adopted with respect to usage of this face mask.

A That's correct.

Q Now, would you continue with what you were saying with respect to the background for the adoption at this particular time of these regulations?

A Well, we think that the face piece has a good deal -- it is impossible according to the research reports we have to get a completely tight gas free fit of the face mask with a beard. These face masks are not custom fitted. There is one -- there are anywhere from one, two or three basic shapes of the mask face piece that is designed to fit the general contours of the normal face.

It is not custom fitted as our helmets are.

A fireman's helmet is fitted individually to each head. It takes account of every contour of the head. The face piece does not do this. Therefore, to get the best possible seal, you have to have, according to research reports, you have to have a clean face to do it. One of the research reports points out that even the absence of dentures can disturb an airtight fit.

Q And can you explain to the Court why at this particular time these regulations were adopted?

A Well, the experience of other departments that we have been in contact with have proven that the introduction of these regulations are rather traumatic.

MR. WEXLER: I object to this as strictly hearsay.

THE COURT: I will sustain that objection at this point.

Q ARe you aware --

THE COURT: What custom and experience other departments have does not count. It is within your department.

THE WITNESS: I am trying to explain it. And actually the delay --

THE COURT: Has there been any occasion whatsoever why these regulations should have been

promulgated now, as of July 1, 1974, rather than, say, June, 1964 or June 1972, or June or May 1971?

THE WITNESS: Yes. It does relate --

THE COURT: What occasion arose at the time to cause the promulgation of these regulations?

THE WITNESS: All right. The experience within the job is the marked increase in the amount of time we were losing due to heat exhaustion cases and smoke inhalation cases at fires, particularly during the last two to three months.

THE COURT: Did they wear masks against smoke inhalation?

THE WITNESS: The wearing of the mask is probably not as universally employed as it should be. One of the reasons is the bulkiness of the mask.

It would seem to be, too, that a possible other reason for the wearing of the mask is the difficulty in donning it if you have a full face of hair.

The third thing is that with heat exhaustion, it is reasonable to expect that if you have an insulating blanket of hair on your face and head and you do increase the body temperature, you are going to become incapacitated faster.

Now, this has resulted in increased relief of

men during their work tour, the placing of fire companies out of service, and it compromises the quality of fire protection of the City of New York.

These are the experiences of the New York City Fire Department that prompted the order.

THE COURT: I have one more question and then I will keep quiet.

Is there a greater incidence of growing of beards on mask now, say than prior to July 1, 1974, the date of the promulgation of the rules as compared to, say, June or July '64-July '74 -- that is a 10 year period -- is there a greater incidence of hair growing and beard growing, or a lesser incidence, as far as you are concerned, with your Department -- and I am not talking about anybody else?

THE WITNESS: I would say that I have no objective data to support it, but it would seem to me that the number of beards and long hair have lessened in the last year.

THE COURT: I am almost inclined to agree with that. The only reason I asked the question -- of course, that does not change the hazard of it, I understand that.

BY MS. CARROLL:

Q Commissioner, were you aware of decisions of other courts in coming to your conclusion in promulgating the regulations?

THE COURT: That is not for him.

MS. CARROLL: It goes to the state of mind. It doesn't go to the truth of the assertion.

THE COURT: If you want me to be influenced by what other courts have done, you may ask the question, but I say to you this Court will make, as I said this morning, this Court will make its own determination as to the safety hazard that is required by reason of the fact that beards may cause a lack of safety on the circumstances.

MS. CARROLL: I am not directing the question towards you, your Honor, I am directing it toward establishing the state of mind of the Commissioner in making a decision with respect to the promulgation of rules, and I think it is a germane question.

THE COURT: Did you do that because some other Court said that beards might be hazardous or did you do it because you felt it was hazardous in the job itself, as far as your own men were concerned?

THE WITNESS: We knew the condition was hazardous, but we hesitated, you know, promulgating the

regulations. We were waiting to see how the courts decided in other jurisdictions, and particularly in the City of Philadelphia.

The Fire Commissioner down there and I have a close relationship. I kept in contact with him. When it appeared that he was about to get a favorable decision, I would say that that at least encouraged us in part to go ahead with it.

I might also add that when we did go ahead with it that he stated to me, he called me to tell me that he was glad to see us move ahead, because it put him in a difficult position sustaining a safety policy when the largest fire department in the country failed to take the same action.

THE COURT: Outside of relying on a fellow commissioner down in Philadelphia, did you rely on any of the expert tests that were made as far as the effectiveness of a mask either being sealed or unsealed by reason of the hair being around the face?

THE WITNESS: As I stated before, I worked for four years now with the people in National Aeronautic and Space Agency in an attempt to devise a better mask, and a good part of the discussion in the meetings that we have had have revolved around the ability to

get a tight fit of the face piece and the impossibility of doing that when you wear a beard and/or long hair.

THE COURT: The mask, of course, affects the facial features as far as sealing is concerned. Does it have any effect as far as the hair is concerned? Do you have any incidences where hair is itself, because of its length, has caused any hazard on the job?

THE WITNESS: Well, your Honor --

THE COURT: I am talking about the City of New York, that is what we are concerned with; I am not concerned with anybody else.

THE WITNESS: If I can refer to the Philadelphia case for one moment, in the case there, one of the plaintiffs there came into Court to illustrate that his hair was not flammable --

MR. WEXLER: I object to this.

THE COURT: I am going to allow him to answer because I asked the question and I am sure if I ask a question of the Commissioner, the Commissioner knows I ask the questions and he will answer it.

You may proceed.

THE WITNESS: And the plaintiff there, to demonstrate that his hair was not flammable, put a cigarette lighter to his head and did actually go on fire.

THE COURT: That's for sure. That will happen to anybody, not only him, but women, men, children.

THE WITNESS: I think it makes the point.

THE COURT: Flammability is never in dispute in this Court.

THE WITNESS: If the Judge would allow me a little latitude in the same area --

THE COURT: Sure.

THE WITNESS: -- there is --

THE COURT: I am going to allow you the latitude.

THE WITNESS: There is an increasing concern for the safety of firemen, not only with the administration, but with the men themselves.

If I can give you an example of the hazard that they enter everyday and the need for removing all risks, I would like to also call your attention to the fact that quite recently after almost nine years of deliberations, we agreed with the fire fighters union on a new work uniform. It is made of an acetate and it is --

THE COURT: Is that the one that is mostly flammable, quite flammable, I should say? I read something about it somewhere, I don't remember where?

THE WITNESS: It has about the same burning characteristics as cotton, but when it does burn it has a melting effect. The men were concerned about this. They appealed to us and they asked us to give them discretion in wearing that while we develope a new fire resistive uniform.

THE COURT: Wouldn't you say that was more dangerous than what we are talking about today; if it melts and adheres to the body, it could blister the body and so on?

THE WITNESS: No.

THE COURT: No?

THE WITNESS: For one reason, your Honor, the work clothes are covered by their fire fighting gear, a big heavy canvas coat and boots, very little of it is exposed, no more than, say, a comparable area of the hair.

To respond to their concern, the City of New York is increasing their uniform allowance so that we can develop a fire resistant work clothes to reduce the hazard of fire fighting. It is incongruous -- it would be contradictory for us to go to that length to improve the safety of fire fighting, and knowing the risks involved on the basis of reliable research, for us to continue to allow or to assume the risk

attached to wearing beards with masks and long hair in fire areas.

THE COURT: I have one more question as far as long hair in concerned, and I think you will agree with me just to decide a case on the basis of long hair or short hair would not be a fair and just decision, it has to have something to do with the hazards of the job itself.

THE WITNESS: Yes.

THE COURT: The fire fighters hat, of course, is a helmet type hat with a sort of canopy or brim on the back. Does that cover the length of the hair?

THE WITNESS: No. The brim goes out at a right angle --

THE COURT: Then I have one other question after that; then I am through.

THE WITNESS: We say that the regulations require that there can be no hair hanging below the brim or the -- I guess the brim of the --

THE COURT: There would be a canopy?

THE WITNESS: The canopy would be an extension of the brim. The answer is that it does not cover it.

(continued next page.)

THE COURT: Does it make any difference whether the hair touches the collar or not, as far as the hazards are concerned at a fire?

THE WITNESS: I think that when you start from the point, you are talking about the length of the hair and the fact that the hair --

THE COURT: That goes to grooming.

THE WITNESS: Right. Below that, you know, you could say, if he wanted to let, you know, the fuzz grow down to his back, it really isn't associated with safety and I can't argue with it. But we have to, in enforcing a policy, come up with some standard. We use standards developed by other agencies and the Armed Forces. We think it is reasonable and consistent with the other part of the policy that says that the hair can't hang below there.

I would also say that if you had the opportunity to see some of the people who the commanders in the field have accepted that they are allowing leeway. The man doesn't have to have his hair flush to the skin.

THE COURT: Whatever is reasonable under the circumstances.

THE WITNESS: I have seen some of them that they have not taken exception to, and if grooming is

the thing, and their esthetic appearance, I would say that our commanders in the field are being rather generous.

THE COURT: In any event, your reputation has been as a man of forthrightness and reasonableness, I would say that to you.

THE WITNESS: Thank you.

THE COURT: And your answer to that indicates that.

THE WITNESS: Thank you.

BY MS. CARROLL:

Q With respect to one of the plaintiffs there is allegation that he has his hair down to the middle of his back. From your experience as a fire fighter, what would be the effect of having such long hair on in terms of safety in fighting fires?

A Well, there are situations where, through changing in the thermal conditions on a fire floor, that firemen do become engulfed in heat and smoke. We have in the past three months probably have had four seriously burned firemen who were engulfed, as I described to you, in the burn unit at Jacobi Hospital for long periods, and to add another inflammable material in close proximity to your body, you know, just increases the risk to an extent

that I don't think is warranted.

Q So then you would say that based on your experience having hair to the middle of your back would create a condition that would not aid safety in terms of the fire fighter himself?

A That's correct.

THE COURT: That is not the regulation, that is not what --

MS. CARROLL: I would like to continue with my case, if I may.

THE COURT: We are talking about the hair touching the collar.

MS. CARROLL: You talked about it. I am talking about the allegation in the complaint.

THE COURT: Isn't that the regulation, the hair touching the collar?

THE WITNESS: There are two regulations; first of all, you can't have any hair hanging below the helmet and, secondly, you can't have your hair growing below the collar.

THE COURT: Right.

MS. CARROLL: I think it is reasonable, too, in terms of presenting this case, to refute the allegations that plaintiffs have made with respect to

the fact that their length of hair does not in any way impede the safety of the operation of the Fire Department, and that question was directed towards that.

Q In your experience --

THE COURT: That's why I asked the question. I want to know the incidence of hair burning in fires if there have been firemen who have gone into fires in the City of New York -- I am not concerned about Philadelphia or San Francisco -- whether or not there has been any incidents of any fireman whose hair has caught on fire who has worn hair that has extended beyond the limits of the helmet that he wears.

MS. CARROLL: Apparently the people who --

THE COURT: Not "apparently."

MS. CARROLL: Persons who have died in fires, obviously their hair was in flame.

THE COURT: I want to know the factual basis.

MS. CARROLL: You would like to know specifically?

THE COURT: From the Commissioner.

THE WITNESS: O.K. I couldn't be able to give you the figures, but I could say, you know, that over the period of years we have had experience where

firemen have been burned and their hair has been burned with them, and it is a risk.

I would also point out that we know, for example -- we could say, you know, as an analogy, we know that radiation is a hazard and if we don't have regulations to anticipate in advance how we operate in situations where we have a radioactive incident, you know, we would be negligent.

We have never had anybody killed from a radioactive source, but if we don't have a policy and regulations, you know, restricting our operations there, we may well have -- in some future point in time we may have, and if we didn't provide for that we would be certainly accused of being negligent, and I think the same analogy applies to the hair.

BY MS. CARROLL:

Q In your experience, are fire fighters called on frequently to perform mouth-to-mouth resuscitation?

A Yes.

Q What is the effect of having facial hair and beards and moustache on the effectiveness of such performance?

A Once again, I think it would be an impediment. I think one of the points made in the research papers, it isn't only the point --

MR. WEXLER: Your Honor, I am going to have to object if he is going to echo what is in the research paper.

THE COURT: We will have someone from research to tell us about that.

Is there any effect really from mouth-to-mouth resuscitation if a person puts his lips --

MS. CARROLL: I would like the witness to answer the question. If your Honor objects to the thrust of the testimony --

THE COURT: I am trying to find out from the Commissioner --

MS. CARROLL: This is the direct case and your Honor is cross-examining the witness.

THE COURT: No, I am not. The Commissioner knows I am not cross-examining him.

Am I cross-examining you? Absolutely not. I am asking questions.

MS. CARROLL: I would like him to be able to respond to the question.

THE COURT: They are as direct as your questions.

THE WITNESS: Again, mouth-to-mouth resuscitation depends upon building up a positive pressure within

the lungs of the victim, and anything that would interfere again, with the efficiency of the seal is going to reduce the effectiveness of the mouth-to-mouth resuscitation.

MS. CARROLL: Thank you.

THE COURT: Would that be because of a beard alone, a moustache alone or both?

THE WITNESS: I think it could be. To the degree that you have interference in making the seal on the mouth of the victim, whether it is the hair hanging from the beard or from the moustache I think is academic.

Q You mentioned previously that there was an effect on dissipation of body heat from excessive face or body hair. I wonder if you can't elaborate on that point. Could you explain that?

A I think I made the point that one of the ways that we dissipate the heat generated by the body is through perspiration and the evaporation of the perspiration which has a cooling effect which depresses the temperature of the body.

Now, to the extent that you reduce your skin surface and you reduce the evaporation rate, you reduce the cooling effect on the body and you raise the temperature of the body

and you decrease the effectiveness of the individual.

When I look at the records of the Fire Department and see the increases in the recuperation time requested by firemen, and the number of companies that are placed out of service as a result of it, and the decrease in the quality of protection to the people of this city, I have to relate all factors that may be influencing it, and certainly this is one.

In your experience, is there need for on-the-scene medical treatment of fire fighters in the general operation of the department?

THE COURT: Is there what? I didn't hear the question.

MS. CARROLL: Do you understand it?

THE WITNESS: I didn't --

MR. WEXLER: I didn't hear it.

THE COURT: I have to hear the question.

Q In your experience, is there a need for on-the-scene, at the site of the fire, medical treatment of firemen?

A Yes.

Q And is there any effect of face hair or beards on the effectiveness of such medical treatment, from your experience?

A Yes.

MR. WEXLER: Your Honor, I think I am going to have to object to this. I allowed the Commissioner --

THE COURT: Is this part of a safety hazard?

THE WITNESS: Yes. We point out --

THE COURT: I will allow it.

THE WITNESS: We point out in our regulation that if a fireman suffers a laceration, that there is an increase in the possibility of infection if the laceration happens to be surrounded by hair.

THE COURT: Would that be any different if he has a cut on his head and he has hair on his head, regardless of whether short or long?

THE WITNESS: The greater the surface area of your body that is covered with hair, the greater the risk that you are going to get infection.

THE COURT: If his cheek is lacerated and he has a beard, it is no difference than if his head is lacerated and he has hair.

THE WITNESS: But if his cheek is lacerated and he does not have a beard, the chances of him having an infection on his face is lessened.

THE COURT: You are telling me he shouldn't get a cut on his head?

THE WITNESS: That's why he wears a helmet.

THE COURT: All right.

THE WITNESS: Judge, to follow up on that, our men work in some of the dirtiest, filthiest locations; disease-ridden areas in the city, and there is a real relationship.

THE COURT: No question about it. You don't have to explain that to me at all. I realize that.

BY MS CARROLL:

Q With respect to the medical treatment at the scene, would you say that immediacy is a pressing factor in terms of the efficacy of the medical treatment?

A We have doctors and MERV vans on the scene, and that is evidence enough of the immediacy.

Q With respect to the presence of hair, would that not in fact slow down the medical procedure in terms of caring for a person?

A I think it slows it down in the sense that they have to shave it first before they can provide treatment.

Q Can you tell us, did these fire department regulations apply to all personnel of the Fire Department?

A No, they only applied to the men who are actually engaged in fire fighting. They would not apply to people who are assigned to the Division of Fire Prevention, headquarters assignments, community relations or any of our

non-fire fighting functions.

Q Can you tell us the basis for your --

THE COURT: How about the officers, it wouldn't apply to officers either, would it?

THE WITNESS: The officers engaged in fire fighting, yes.

Q Can you tell us the basis for that decision to limit the effectiveness of the rule with respect to having it only apply to fire fighters?

A Because the rule is directed at the increased safety in the fire fighting situation, and as I pointed out to you before, its basis is not for grooming standards.

Q Can you tell us, has there been substantial compliance with this regulation in the Department?

A The compliance, according to the reports I got, is probably in excess of 99-9/10ths percent.

Q Are you aware of a position taken by the United Fire Fighters Association, the Uniformed Fire Fighters Association, with resepct to --

MR. WEXLER: I object.

THE COURT: I will allow it.

Q (Continuing) -- with respect to the regulations being challenged herein?

A The Fire Fighters Association have supported me

in this particular policy.

Q Do you imagine any difficulties in your administrative capacity in terms of administering a separate set of regulations for these plaintiffs for whom the application of these rules are presently stayed as compared with enforcing the regulations as to other members of the Department?

A I don't think dual standards are in the best interest of the discipline and efficiency of the Department, and I hope that the condition does not exist.

Q Would you give us the basis for the adoption of the regulation with respect to the length of hair as being terminated at the collar in terms of the safety requirements?

A Well, the regulation says that there is no hair to be hanging below the rim of the helmet, and that the hair in general has to end at the bottom of the collar.

This allows for a variety of amounts of hair below the brim, as long as it is not hanging shingled, but some fellows who have a heavy growth of hair can shingle it and they have considerably more hair back here than I do, and we think it is reasonable, it allows him to do his thing, I suppose, and yet it does not become excessive to the extent where it compromises safety, and that is what it is designed to do. It is not -- well, I will close at that.

Q Is there anything further you would like to inform the Court of with respect to the adoption of these regulations from a safety standpoint?

A Only that we have it due consideration. We didn't go into it hastily. We notified the members of the Department via television almost two months ago to try to give them a chance to reconcile themselves to it.

We promulgated the regulations on July 1. We didn't begin the enforcement action for another week and then we gave another extension for another two days until the 15th to give everybody a chance to comply. We think it's reasonable. I think that it is necessary for the safe and effective operation of the Department and I hope the Judge thinks likewise.

Q With respect to the plaintiffs here in this case, there has been no enforcement of the regulation with respect to them, is that correct?

A That's correct.

MS. CARROLL: Thank you.

THE COURT: I have just one more question.

What was the incidence again of hair or beards prior to this regulation so far as percentage? You said 99 percent have complied with the regulation. I assume then you have a percentage who had long hair

and who had beards and who had long sideburns.

THE WITNESS: No. All we had, your Honor, is the record of the people who have reported to work and who have been inspected by their commanding officers, and the reports that we have gotten back is that there has been virtually complete compliance.

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THE COURT: Prior to that, did you have any record of whom --

THE WITNESS: No.

THE COURT: Wasn't there any type of a survey to determine whether or not there was such an incident of facial problems with beards and mustaches and long hair that would lead you to the conclusion that you, of necessity, because of safety and hazardous conditions that might result, that you had to promulgate such rules?

THE WITNESS: No. There were a sufficient number of men -- I don't know what the exact number was, but I would say that if you went to a number of fires, you could see that there were a sufficient number of men who had this facial and hair condition to make it rather obvious that some sort of guideline or policy was necessary.

THE COURT: How many would you say now are in violation of the Section itself, of the regulation?

THE WITNESS: The only two that I am aware of, are the two gentlemen that are in the court.

THE COURT: Were there any more than that prior to that; would you say there were two tenths of a hundred percent, or one tenth of a hundred percent?

THE WITNESS: I would say that we would probably--

I have no basis, I would say we are probably talking about twenty percent.

THE COURT: Generally, the fireman was pretty clean-shaven, wasn't he, in your experience as Fire Commissioner? You have been around a long time, like I have been around a long time, and we have seen each other here and there, haven't we?

THE WITNESS: Yes.

THE COURT: The firemen have been pretty well clean-shaven, as far as the period that you and I have seen; is that what you would say?

THE WITNESS: That's what you and I were used to. But now I think the grooming standard and preference of firemen have changed to a considerable extent where maybe eighty percent of our people opt for that type of hairstyle and so forth --

THE COURT: You mean they are just catching up now, is that right?

THE WITNESS: That's right.

THE COURT: Like basketball, catch-up ball.

THE WITNESS: That's right.

THE COURT: You may examine, Mr. Wexler.

CROSS EXAMINATION

BY MR. WEXLER:

Q Commissioner, you told us you waited until the

Philadelphia case, that there was a Court decision before you enacted your July 1, '74 regulation; is that correct?

A That's not exactly what I said. I said when I was informed that the Philadelphia department expected a favorable decision, that is when we moved ahead.

Q You relied heavily on the NASA test, isn't that true?

A I rely heavily on my involvement with NASA. NASA never per se, ran any test.

Q Well, did you see the affidavit submitted with the NASA test?

Are you telling us NASA didn't do any tests?

A I am saying NASA relied on tests done by other people. NASA did research and evaluation and if it says NASA tests, then I would say that was a typographical or a grammatical error.

I can also tell you that it is, you know, that the deliberation that NASA in the development of an integrated life support system for firefighters came to the emphatic conclusion that beards were not consistent with face mask fit.

In fact, in all probability, the newly-designed facepiece that we hope to test within the next three months in New York City, would be even more difficult to don properly with a beard.

Q Commissioner, you are using the Scott Air Pack

pressure type, I think it is Series 6,000; is that correct?

A That's correct.

Q That wasn't tested by NASA; right?

A NASA did not test it per se, no.

Q All right. Now, that is known as a half-mask, isn't that right?

A Half-mask in what sense?

Q In comparison to what they describe as a half-mask in a full mask, the mask that your city department uses is known as a half-mask, in comparison to a full mask?

A In contrast to a full headpiece, yes.

Q How long have you been using the Scott Air Pack?

A In New York City?

Q Yes.

A Since 1946 or '47.

Q In fact, you have a smoke chamber where you test men with beards, isn't that a fact?

A Let me say that we have ran some tests in our smoke chamber with men with beards. We are not in the testing business, and we do not have the facilities to conduct a --

Q Commissioner, how many tests have you run with men with beards, in order to get a seal on the individual with the Scott Pack?

A I don't understand your question.

Q How many tests were run with men with beards in

your smoke tunnel?

A In the smoke room?

Q Yes.

A Several. I don't know what the number is.

Q Well, isn't it more than 200?

A I am not certain. I did not rely on our tests, because I do not rely on our ability as a testing agency. We are not a testing agency.

I have much more confidence in people such as the Atomic Energy Commission, the doctor at Harvard, who did the testing, and various other people --

Q You are not relying on your own tests, is that correct?

A That's correct.

Q Am I correct in saying that every man passed the seal of your own test?

A You would not be correct in saying that.

Q Do you know how many men failed?

A I know that the test they ran with tear gas, the tear gas didn't penetrate the mask, but I know that they ran tests with other gases, where the gas did penetrate the face piece.

Q What gas was that?

A I am not sure now. I think they might have been burned banana oil, if I am not mistaken.

THE COURT: What is that?

THE WITNESS: Banana oil.

Q So you are not relying on your own, you are relying on others, is tHatcorrect?

A I am relying on recognized and reliable testimony.

Q Sir, your answering affidavit contains the record of NASA. Are you relying on that?

MS. CARROLL: I object, your Honor. There is no answering affidavit from the Commissioner. There is an answering affidavit from --

THE COURT: We understand that question from your side.

He promulgated t[illegible]le; he is the Commissioner, so he has to answer the question.

(Continued on next page.)

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CROSS-EXAMINATION

BY MR. WEXLER (CONTINUING):

A I am relying on four years of experience in working with the people of the crew systems of Nassau in developing an integrated life support system for firemen on the basis of the experience I had with them and their opinions and our discussions. On the basis of this, we had to make a judgment that it is not feasible to get a satisfactory seal of a face piece on a fireman with a beard.

Q Fine.

Now, do you have any statistics or any cases of men who had beards and went into fires and were injured in your department of 11,000 men over ten years?

A We do not keep that type of statistics.

Q Do you know of any?

A Any men injured because they had beards?

Q Leakage and they were wearing beards.

A All I know is that the incidence of smoke inhalation is increasing --

Q Was that with or without --

A (Continuing) Please --

Q (Continuing) Wait a while.

Commissioner, my question to you -- and if you know, tell me and if not tell me that you don't know -- is

concerning men wearing beards with the Scott packed mask and the incidence of injury to them.

A I would say men with beards and Scott masks were injured, as to the statistics, no.

Q Do you have any cases?

A Any specific cases?

Q Yes.

A No. I don't keep those records.

Q Do you know of any incidents where men's beards burned -- not a fireman completely killed and his body charred -- I am just talking about his beard burning.

A I'd have to check with our medical officer. No.

Q Do you know of any men where the back of their hair burned -- not a man dying in a fire -- just the back of the hair?

A We have records of men having their hair burned, yes.

Q Below or above the collar?

A Below the rim of the helmet.

Q How many cases do you have, do you know?

A I don't know the exact number but I know there are records that they had hair burned in the circumstances you describe.

Q Now, does the moustache interfere with the

Scott Pack if it is over the upper lip?

A There is a concept called respiratory efficiency --

Q No. Does it interfere with the seal of the mask?

A I thought the effective of the mask's operation is what you were referring to.

I would say, no, I don't believe so.

Q How about a --

A (Continuing) Let me qualify that, please.

If the absence of dentures would interfere it is possible that a moustache of excessive dimensions could also interfere.

Q I am talking about a moustache beyond the outer limits of the upper lip.

A It depends upon how it is trimmed, you know.

Q Are you familiar with the Master report on page 6, "Not all hair styles shown interfere with a respirator. For example, a small moustache, small Van Dyke beard or short to medium sideburns would probably not cause difficulty."

Are you familiar with that?

A Yes.

Q Do you agree with that?

A Yes.

THE COURT: Does that come within your regulations?

THE WITNESS: Yes.

THE COURT: Is that a grooming aspect or a safety aspect?

THE WITNESS: From a practical aspect we allow sideburns to the lobe of the ear and a small well-trimmed moustache. We do not allow goatees because as you expand, with 13,500 men you cannot have the company officer out there as a tonsorial expert so we feel in our regulations we have gone as far as we can go.

Q How about small Van Dyke beards?

A We opted not to allow those because we feel it is difficult to enforce.

THE COURT: As a matter of practicality?

THE WITNESS: Right.

THE COURT: All right.

I do have one question: Do all face masks have a certain amount of leakage regardless of the hair and the length of exposure, which may be dangerous?

THE WITNESS: I would say that in a good number of cases with the general countours of the mask -- in

other words, the mask is an all-personed mask.

Depending on the contours of your face, with or without a beard you can have more or less leakage.

THE COURT: For example, a man with sunken cheeks has a greater propensity for leakage than the fellow with a round jowel type of face.

THE WITNESS: Exactly.

Our new face piece will hopefully make a better seal but it will be more difficult to get a new seal for a beard.

Q If someone had a beard up to the chin and I understand the seal of the Scott packed is about two inches below and therefore it is not touching any hair, that would be a good seal?

A Explain that again, please?

Q If someone had a beard coming to the end of the chin --

THE COURT: He answered that. He said the Van Dyke would be a matter of practicality. The half-inch or quarter of an inch doesn't matter because he says he cannot inspect 11,000 men. He'd have to get officers for inspection duty and they wouldn't be able to fight fires.

MR. WEXLER: I want to see if he concedes that if there is no hair where the seal is it doesn't

affect the mask.

Q Is that correct -- the seal?

A You mean -- you are assuming we could have somebody who would trim his whiskers so the limits of the mask coincided with his beard and would that be acceptable?

Q Yes.

A I would say that is an impossibility because our people do not don their masks in a controlled atmosphere.

Q Let's talk about it theoratically.

THE COURT: They don't look in a mirror to see if it fits. They put the mask on under pressure.

Q Theoretically, could it work, if there was no hair and the seal is under the chin without hair?

A It is impossible to administer --

Q I am talking about, would the seal work.

A I couldn't say. I don't know if you could get that condition.

Q You don't know if the seal would work if there was no hair under the chin?

A I don't know if you could guarantee me that when he puts the mask on during an emergency he could get the mask to coincide exactly with his beard. All he has to do is get the chin space in under, put the hair underneath and you get seepage.

Q Isn't it part of your regulations to check the men Saturdays and Sundays to see if the men have a seal?

A We check to see if they get as effective a seal as possible but that doesn't check for a completely effective seal.

We have the man inhale and if he inhales sufficiently strong enough he will collapse.

The face piece -- I assume that is the test you are referring to.

Q Yes. That is given Saturdays and Sundays to the men?

A Yes. You have leakage around that and all he has to have is sufficient lung power to overcome the seepage and the face piece will collapse and that will allow enough carbon monoxide and that, in its smallest concentration is cumulative and you will have a man fully unconscious, face down in a cellar with a fully functioning mask.

Q Do you have any such experiences?

A Yes, we have had firemen killed with fully operational masks on them and I haven't been able to tell the reason why and that's one reason for my concern now.

I have to eliminate every possible risk these people take when they go into fire fighting. That's my job.

Q All the testing, Los Alamos and the others we

referred to, had nothing to do with long hair, had it?

A Nothing to do with long hair?

Q Yes.

A They are primarily talking about beards, I imagine.

Q Isn't that true?

A Yes.

Q You said you are familiar with it and participated --

A No. I didn't participate in the Los Alamos testing. I have read about it. I participated in the research and development program with NASA.

Q THat has only to do with the beards and nothing to do with long hari?

A That supports the policy for the long hair, yes.

Q And you feel that it's subject to burning and therefore you passed your regulations only to touch the collar?

A That is correct.

MR. WEXLER: No further questions.

(Continued next page)

REDIRECT EXAMINATION

BY MS. CARROLL:

Q You stated with respect to counsel's question as to whether or not you had statistics that would demonstrate whether persons who have long hair were victims in fires -- even though you do not have those statistics how would you, from your experience, categorize the potential for danger of such a situation?

A I would say that it adds an additional risk to the job of fire fighting that's not worth taking in my opinion.

Q With respect to a fireman injured in the line of duty, what is the civil liability of the Fire Department of the City of New York?

MR. WEXLER: I object to that.

Q With respect to injury of a fire fighter in the line of duty would you describe the responsibilities of the Department with respect to paying a pension to such a person for disability pay?

MR. WEXLER: Objection.

THE COURT: No.

You may answer.

A If it is proven -- and it has been in the past -- that the Department didn't take every possible step to

avoid injury or death when there were known hazards attached to a particular operation or mask usage, the City has had to pay considerable penalties and we had one of those, several of those at the time we were using filter masks in the Department.

We used them successfully for a long period of time and then several men were killed by wearing them and the Court found us to be irresponsible in continuing our men to use them.

Q So would you say, in terms of promulgating the regulations issued here, that would be a consideration?

MR. WEXLER: Objection to the leading.

A When someone gets killed in the Department, the last man who has to sign off on it and determine the fault of his death, is the Fire Commissioner or Chief of the Department and in too many instances we find we could have prevented loss of life of firemen by being more particular and having better direction at fires and so forth.

Now, in that context, there is responsibility not only for the civil liability but also a responsibility to the man's family and the responsibility lies with me and if I don't promulgate policies to alleviate risks, similar to those we are discussing here, I would be negligent.

MS. CARROLL: Nothing further.

RECROSS-EXAMINATION

BY MR. WEXLER:

Q Am I correct Commissioner when I say that the Los Alamos report states that with certain half masks you can have wide sideburns, you can have the VanDyke beard and mustaches and have no effect on the feel, the mask; isn't that correct?

A You have me at a disadvantage --

THE COURT: Show it to him.

(Document shown to witness.)

A Well, it says -- can we read it for the record? I think you are paraphrasing.

Q Certainly.

A It says he can get the fit in some instances and in other instances he didn't get the fit --

Q It says in two out of three --

THE COURT: Read the whole paragraph.

THE WITNESS: "Subject 13 also had a VanDyke beard, as well as wide sideburns. His beard was of the more conventional pointed type and was not as dense as the preceding subjects nor quite so long. He obtained a satisfactory fit with all masks except the wide half-mask D, which interfered with his sideburns, and full-facepiece A. His results with

full-facepieces C and D were higher than subject 12's but this could possibly be due to differences in facial dimensions" --

Q And they are talking about three types of half-masks and two out of three you can have the wide sideburns and VanDyke beard and still get a good feel -- two out of three.

So, my question is, which one is the Scot?

If you rely upon that and you cannot get a feel and in one out of three, you can, I'd like the Court and myself to know -- A and C you get a good feel and D you cannot and I would like to know which is D?

A There is another condition attached to that and that is that the sideburns are not too bushy and the beard not too dense and big.

In a Department of 13,500 men where an officer works with anywhere up to 11 or 12 different men it is impractical to enforce a regulation that says you can have a VanDyke beard as long as it is not too bushy and we allow sideburns down to the bottom lobe of the ear and beyond that it is impossible to enforce and we only run the risk of men being overcome with gas when it is not properly enforced.

Q If you rule out your testing done every Saturday and Sunday, why do it?

A We test to see that we get a complete a feel as possible. I'm saying it is not a total feel.

Q Why even do that if it means nothing?

A It doesn't mean nothing.

Q Does it have value?

A Yes, it shows he is getting an effective a feel as possible with his facial contours.

Q If a man passes a stationhouse test he is getting an effective feel?

A Not necessarily.

We are saying he is getting as effective a feel as the mask allows and it tests whether or not there are holes in the mask.

Q Are you testing the man or the mask on this Saturday and Sunday?

A Both.

Q So, the test of the man must have some effect?

A IT teaches him how to get the best effective feel, the most effective feel and I'm telling you with the beard you reduce the effectiveness of the feel.

Q If I tell you all your men passed the Saturday and Sunday test with beards before July 1st, are you saying that test means nothing or are you saying, "Yes, they passed and had an effective feel"?

A If they didn't have a beard on they'd have a better feel.

Q Would they have an effective feel if they passed their tests on Saturday and Sunday before July 1st, 1974?

MS. CARROLL: Objection. This has been asked and answered.

THE COURT: I'll allow it.

Q I want to know, would they have an effective feel?

A No, because if they get a more effective feel than that, that is what they should have. Anything less than the optimum available is unsatisfactory and not what we want.

Q You know you will never get a perfect feel?

A We are trying to reach perfection.

Q Your rules and regulations call for a satisfactory feel, not perfection?

A Our rules and regulations call for as close to perfect as possible.

Q So, when you did 10 years of testing, that didn't mean anything?

A It showed that there were no holes and they got the most effective feel possible.

Q You let them work under that condition?

A It is thebest condition possible and I have

worked for the last 10 or 15 years trying to develop a better mask.

Q None has come out?

A It is being tested in the Houston Fire Department and we hope to have it in New York October 1st. It should have been here last December.

Q Will the men be able to wear beards with that?

A I think it will be even more difficult.

MR. WEXLER: No further questions.

MS. CARROLL: I have one other witness.

Robert F. Mendes, please.

R O B E R T F . M E N D E S , having been first duly sworn by the Clerk of the Court, took the witness stand and testified as follows:

THE CLERK: State your name and spell it for the record, please.

THE WITNESS: Robert F. Mendes, M-e-n-d-e-s.

DIRECT EXAMINATION

BY MS. CARROLL:

Q Mr. Mendes, can you tell us your present position in the Fire Department?

A Department Chief of Staff, Fire Department, Uniform Force and Assistant Chief of the Department.

Q Can you tell us what duties this position

entails?

A I am the Executive Officer of the Chief of Staff who runs the Uniform Force under the Fire Commissioner and I have particular responsibilities in the Division of Safety, Medical Division, Division of Training and Personnel.

Q With respect to the -- you are affiliated with the Medical Division?

A Yes.

Q Can you tell us from your experience if any problems have been encountered in the incidence of firemen who have beards or mustaches in terms of medical treatment?

A No I cannot.

Q Can you tell us if you have had reports from doctors with respect to problems?

A Yes.

Q Can you give us -- can you tell us what essentially was the thrust of that information received?

MR. WEXLER: Objection to what doctors may have told him.

THE COURT: Was this in reference to firemen?

THE WITNESS: Yes.

Q These doctors would report to you in terms of their operations in the Department?

THE COURT: In the course of the business of

the Fire Department?

THE WITNESS: Yes.

A It is my particular job to watch the accident and injury figures as they go up and down; look at fire incidents, relate and correlate figures one to another.

It is not my business to examine a man and then find out, does he have a beard or not.

However, we had a collapse in the Bronx. I was working the other night in the Brooklyn Navy Yard and it was a fireman trapped in the second chamber of the dry dock where the valve broke and it was flooded and he died.

That man had a mask on and if one of our firemen, as we did in the past, put on a scuba diving mask, as Lieutenant Hamilton did, when the bus went over into Wards Creek, a small thing like long hair for example, especially long hair when caught in a pigtail, just is not the kind of thing you would send a man down into a dry dock or wreckage of a bus or automobile for. That pigtail will catch. We make a great deal of fuss about ragged sleeves on a coat and we repair it. We will not have any dangling buttons or belts. We cannot tolerate pigtails because when he goes to pull people out and when we pull him out, if it is caught in the wreckage and/or on studs, this is more dangerous than with regard to say, just face feels.

Q In terms of a medical treatment of an injured fire fighter has it been brought to your attention that there is difficulty providing medical treatment to such persons?

A Our doctors complain constantly as do the attendants of Montefiore and Jacobi Hospitals where our firemen are brought in and the doctors do not like to have to scrub their faces of matted hair to take nose excreations, vomit, to give mouth to mouth resuscitation and I do not find it asthetic, if he had a beard clotted with blood and nose mucus and vomit and if you worked in rescue you would know that the worst thing they have to do is wipe these people.

There has been a lot of talk about Scott pak packed masks and the Fu Manchu mustache and inhalators with a small piece and a Fu Manchu down here (indicating) interferes with that feel and the resuscitation inhalator we put on a victim's face so the Fu Manchu, while it doesn't interfere with the facepiece of the mask interferes with mouth to mouth blowing, inhalators and resuscitators in order to fight skin burns.

If you breathe into a man's nose, if he has a bushy mustache you can't get any air in.

(Continued next page.)

Mendes-direct

THE COURT: Are these practical matters, or speculation?

THE WITNESS: They happen every day of the week.

THE COURT: In your position, did you make recommendations suggesting that these things were causing these kinds of problems, the beard and the hair -- did you do this through written recommendations?

THE WITNESS: They never came from me.

THE COURT: Did anybody make such recommendations by way of report to the Fire Department?

These things caused so many problems and consternation, why wait until July 1974, to do something like this?

THE WITNESS: I have requested and I think --

THE COURT: No. That's not the question.

THE WITNESS: I never made a study.

THE COURT: Do you know if anyone filed a report with the Fire Department concerning what you are telling me now as to the programs you say the Fire Department faces because of the long hair, mustaches, and beards and so forth, and this is not a new innovation. I recall seeing firemen in the 1800's --

THE WITNESS: They didn't have Scott Air Packs.

THE COURT: They had vomit in those days.

THE WITNESS: Oh, yes.

THE COURT: Is there any report that you can recall, or any regulation you have or any report? Did anyone say "Look, this is serious. Do something about it." Other than now?

THE WITNESS: My personal knowledge?

THE COURT: Yes. I'm trying a lawsuit, and when you come into court, it is not a question of just expounding on a certain treatise. You must expound on something factual.

Do you want to take over now?

MS. CARROLL: Yes. Thanks, thanks very much.

CONTINUED DIRECT EXAMINATION

BY MS CARROLL:

Q You testified that you in fact received reports from doctors with respect to the difficulties of effective medical treatment on firemen with beards and mustaches.

A Visited the medical officers, and they verbally told me this.

Q Did you convey this information to the Commissioner and officials of the Fire Department, as a basis for their action promulgating the regulation now?

A That is true.

Q Would you say that the Fire Commissioner is

aware --

THE COURT: When did you convey this?

THE WITNESS: It was not conveyed prior. This was conveyed as the situation grew and accumulated until it became the kind of hazard that we could deal with something tangible; something that regulations would adjust, and that is when it came to the front.

THE COURT: When I ask questions, I ask practical questions, because I think you are in a practical business, and the answers should be practical. You spoke about a scuba diver with his hair splashing in the water. Did you hear of anyone getting his hair caught? You yourself?

THE WITNESS: Not from the top of my head.

THE COURT: I continue to hear this, and I'm still waiting or I have yet have someone come to me and say, " -- had his hair caught in the door" or "Mary, with her long tresses, got her hair caught."

A I cannot respond from direct knowledge.

(Continued on next page.)

THE COURT: I am not disputing herewith the mask. I can understand even some dirt gets under there it causes a problem, or grease.

THE WITNESS: That's right.

THE COURT: When I ask the question I ask it from a practical aspect because we are dealing with practical aspects dealing with human beings.

THE WITNESS: I can respond to a question that was not answered.

THE COURT: You don't go around yelling that everybody with long hair is a hippie.

THE WITNESS: I might grow my hair a little bit. Somebody mentioned, did you ever see hair burn, well, the very plaintiffs in this case if you haven't had your eyelashes burned or the back of your hair on the hands singed where your wife would say, "What ahappened to you?" well, imminently it will happen.

Sometimes a flash will come along and you will have no hair on your hand.

THE COURT: That's a practical answer.

THE WITNESS: And it is true.

THE COURT: I will accept that answer from you.

BY ms. carroll:

Q You haven't had experience of your hair burning in the back because you never had hair back there?

A I have had my hair burned, absolutely, and I don't have long hair.

Q You can envision if you had hair down the middle of your back?

A Absolutely. I haven't worn a mask for years. I am too old. You could grow your hair a little longer like I have.

Q Is the presence of excessive hair on the head have an effect on the safety of the individual fire fighter?

A Excessive hair on the top, that's written this way for a special reason. We don't want to say you have to get a crew cut. We can't say one and a half inches and so departments say, we say excessive length. Those people who are bald and have hair that long and plaster it over and still survive in the social world we live.

The thrust of the department's intent is to prevent excessive hair piled up. Sometimes people tease the hair or blow dry them and it gets like this. In other words, texture has something to do with it.

Q Can you describe the insulating effect of the hair in terms of safety of fire fighting?

A When you are in a room and it is hot in there, you have worked hard, you have sweated up and you smell bad and you may have your maks on. You don't get refreshment

until you get outside and take that mask off so that your face and neck, as much as you can expose to the air,an evaporative quality can remove that perspiration from you which has taken the heat out of your body and you can recover swiftly, rather than if you had your face-piece on and bundled up.

The idea of cooling is to keep you cool inside and exposing your face and skin and the neck and around here does that.

Q Does the presence of excessive hair on the head defeat the function of the body with respect to the skin being exposed skin being a barometer in terms of being -- I will repeat it.

Does the presence of hair on the head affect in any way the barometric function of the skin?

A Yes. If your Honor, for example, grew it a little more over your ears and you went into a building you would be defeating yourself.

Grumman integrated life protection systems working in the Fire Department with a Federal grant and before you insulate a fireman completely from the atmosphere, put an entire dome over your head so no part of your body is exposed and you will communicate with the outside, my response is you have to be careful because the tips of our ears and back of our necks sometimes save our lives

and you must have experienced that.

The first thing that registeres heat when we get in a room or in the dark are the tips of our ears and the back of our neck. If you are looking for a fire in a complex room, you take your gloves off and feel and it is our bare skin that warns us.

THE COURT: I didn't get the business of the hair over the ears.

THE WJTNESS: The hair will insulate you and prevent you from knowing that it is time to go.

THE COURT: It is covered with a hat.

THE WITNESS: And with hair.

THE COURT: I'd suggest that 89 percent of the women are in trouble.

MS. CARROLL: I don't think there are any women involved here.

THE COURT: I know that.

BY MS. CARROLL:

Q Could you continue.

A You are talking about excessive hair, the base pieces like this and you put it on. You may have had the experience where you had long hair and a spider gets on it, you pull on them. When hair gets tangled it is painful to tighten your maks, so excessive hair can interfere with the

mechanical appurtenances which are part of the mask.

Q The plaintiffs allege on their test runs they are able to effect a satisfactory seal.

Would you agree with that statement?

A Shall I define satisfactory seal? I wrote that circular. The word satisfactory means the very best you can do and that's all it means. When we say do a satisfactory job we mean do the best you can with the equipment given to you and under the circumstances you are operating.

We know no piece of equipment is perfect and no human being is perfect. So that satisfactory means the best you can do. It does not imply perfection.

Q With respect to their allegations that with beards present and doing the test they are able to effect a satisfactory seal, would you say that is true?

A That's in their mind. They are the judge of that. When we tell them that, they tell you how to make a test. You inhale and if you depress the thing, fine. They are talking about a practical test on the fire ground, not tests with photometers that measure your micrograms but a practical test under fire conditions is swift and satisfactory, the best you can do under the circumstances.

Q Would you say with the presence of a beard that a fire fighter in performing such a test would be able to effect

maximum seal?

A Impossible. Nobody can effect maximum seal with the capability of that maximum under optimum conditions and the beard would prevent that.

THE COURT: Even without the beard?

THE WITNESS: Even without it you can't.

All these tests are based on five percent leakage.

Q With respect to leakage would you explain what leakage would entail in terms of usage of the mask?

A Leakage can be air going out if it is badly sealed. As you work and you work harder you build up a pressure in the facepiece and excess air will blow outside on any negative pressure on the facepiece inside. You have noxious fumes and gases going in and that can happen if the seal is bad.

MS. CARROLL: I have no further questions.

(continued next page.)

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CROSS-EXAMINATION

BY MR. HAEFELI:

Q Did I understand you to say the manufacturer of Scot indicated when they, the firemen, do the drill and hold the bottom of the hose and if the mask clamps, it's a satisfactory seal?

A I am the chief, not Commissioner.

Q Did you just say that, that Scot said --

A I said we say that. If our training methods are such if we tell the man that it is a satisfactory test to put your hand on the thing after you adjust the spiders and inhale. If you depress the mask, that's satisfactory.

Q I'd like you to look at this bulletin, please, and see if that is one of the bulletins issued by the Fire department.

a It is a training bulletin from the Division of Training, 1966.

Q That's Exhibit C of the plaintiffs; I believe it is C. Would you read the last sentence of the first paragraph?

A "However, it will protect against inhalation of airborne radioactive particles. Breathing equipment doesn't protect against flame, heat or heat exhaustion."

Q The Commissioner testified in the last year

there have been a substantial increase of heat and heat exhaustion cases in the department, thereby reducing efficiency of the department.

A That's correct.

Q The mask itself does not protect and designed to protect against heat or heatexhaustion; is that correct?

A Well --

Q Your training bulletin says the mask is not designed to protect against heat or heat exhaustion; is that correct?

A That bulletin is 1966 --

THE COURT: Answer the question.

THE WITNESS: You are incorrect.

Q Does the training bulletin say that?

A Let me read this again. "Breathing equipment doesn't protect against flame," that's a lie. Heat, it does protect against heat or heat exhaustion; that's a lie.

THE COURT: You mean the training bulletin is a lie?

THE COURT: 1966, that's before this administration.

Q Were you a member of the Fire Department in 1966?

A Yes.

Q Is this a training bulletin issued by the Fire

Department of the City of New York?

A Yes. A half truth is worthless.

Q Do you know of any scientific test performed which established the flammability of hair?

A No.

Q The Commissioner testified that several firemen had been killed with full masks on. Do you know whether or not any of the firemen that were killed had beards on?

A I don't know.

Q You are in charge of the Division of Safety?

A Yes, from October 11, 1973.

Q Since you have been in charge of safety, would you tell us the number of cases where firemen with full beards -- withdrawn.

Where firemen with facial hair in violation of the regulation went into a fire with your Scott Air Pack on and were overcome by smoke --

A No, I don't.

Q You were talking about burning of hair. Are you talking about the hair singing?

A Singing is burning.

Q Do you know of any instance where a fireman's hair caught on fire, full flame?

A I don't know that.

Q Do you know of it in your capacity --

A I have read of this. The Philadelphia test.

Q I am talking about you as chief, do you know of any instance like that?

A No.

THE COURT: Why shouldn't it go on fire if you put a match to it?

MS. CARROLL: I object to this line of questioning.

THE COURT: You want me to take notice that hair does burn?

MR. HAEFELI: I take exception to that.

THE COURT: The problem we face is whether or not under the conditions under which they have passed a regulation is for the safety of the fireman of going into a fire where the part exposed may burn..

MR. HAEFELI: I disagree slightly. If you put a match to a piece of hair it will burn.

BY MR. HAEFELI:

Q In your capacity as safety officer since October of '73, have you conducted or directed that some of your subordinates conduct tests at your installation on Welfare Island where an individual fireman having facial hair in violation of the present regulation was told to put on a mask and

go into a building and exposed to chemical agent or smoke or some other noxious gas?

A I didn't order that.

Q Do you know any test conducted by the Fire Department since that period of time?

A I think some tests or experiments may have been conducted but I don't know if they were officially. Chief Harris is in charge of training under my supervision. He may have used amalastate or some gas from this oil, because it has an odor to do this.

Q You don't know the results of those tests?

A No.

Q The Fire Department conducts a multi-unit drill every Saturday?

A Each company, yes.

Q At that, a fireman puts on a mask and undergoes the test you testified to?

A Yes.

Q They check for seal?

A Yes, that's one of the things, he checks to see if the mask is in the case,that somebody didn't steal it.

Q The man looks at the man with the mask on?

A Right.

Q If it came down to a question of administering

a regulation which allowed for facial hair that didn't break the seal of a mask, that regulation could be administered every Saturday and Sunday when you go through your drill --

MS. CARROLL: I object. If he wants to testify, that's a different matter.

THE COURT: That's not a good question.

Q Could a regulation regarding facial hair be administered at your multi-unit drill on weekends?

THE COURT: Are you asking whether he could have a regulation fit each Saturday?

MR. HAEFELI: No.

THE COURT: Could a regulation be framed --

THE COURT: Meet the requirements on Saturday.

Q You administer a multi-unit drill every Saturday and Sunday and firemen wear various items?

A Yes.

Q The men in a department hit a Saturday or Sunday every month or two months?

A Yes.

Q They undergo that unit test on Saturday or Sunday?

A This mask drill.

Q They undergo them during those periods of time?

A Yes.

THE COURT: Step down.

We will recess until tomorrow morning.

MR. WEXLER: We have one of the plaintiffs here with a beard and has to report back at 6:00 o'clock.

THE COURT: I have signed the injunctive relief so that no harm will come to him.

MR. HAEFELI: One of the men has been assigned to a clerical job pending the outcome of this case. Would that be a violation of your restraining order?

THE COURT: No, not necessarily. I am not going to try to run the Fire Department. I have enough trouble running my chambers back here.

MS. CARROLL: Based on the affidavits since this is a preliminary injunction, it is unfair to subject the defendants --

THE COURT: This is not a preliminary injunction. I said we'd try it on whether or not it would be a permanent injunction or dismissed. My ruling and determination will be final.

MS. CARROLL: Can I request a list of the witnesses they intend to bring in?

MR. WEXLER: I have some of them.

MS. CARROLL: I'd like them, please.

MS. CARROLL: I don't intend to call any further witnesses.

MR. WEXLER: I will give you a list of the witnesses I intend to bring tomorrow morning and reserve the right to call additional witnesses.

* * *

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF NEW YORK

Karmerling, et al., Plaintiffs, - against - O'HAGAN, FIRE COMMISSIONER OF NEW YORK CITY, Defendant.	74 C 1061

United States Courthouse
Brooklyn, New York

July 24, 1974

B e f o r e :

HONORABLE MARK A. COSTANTINO, U.S.D.J.

MICHAEL J. MIELE, C.S.R.
OFFICIAL COURT REPORTER, U.S.D.C.,E.D.N.Y.

Appearances:

MEYER & WEXLER, ESQS.
29 Manor Road
Smithtown, New York
Attorneys for Plaintiffs

BY: LEONARD D. WEXLER, ESQ.
Of Counsel

ADRIAN P. BURKE, ESQ.
Corporation Counsel for New York City

BY: ROSE MARIE CARROLL, ESQ.

NEIL KAMERLING, having been first duly sworn, took the witness stand and testified as follows:

DIRECT EXAMINATION

BY MR. WEXLER:

Q Are you a New York City Fireman now?

A Yes, I am.

Q How long have you been a New York City fireman?

A 4 years.

Q Where are you assigned?

A Engine 851, 169th Street, Boston Road, South Bronx.

Q How many fires a year does your company go to?

A Between 4500 and 5,000 calls.

Q And how many times have you gone to a fire where you had to wear your mask?

A In the last two years?

Q Take it over the time you have been a fireman, four years, 150, 200 times.

Q How many times have you gone to fires with a beard?

A I have had the beard since September 1972 and I would say I used the mask 100 times.

Q What type of beard did you have?

A Full beard.

Q When you say full beard, can you tell me how far down you would say it reached, approximately?

A 4 inches.

Q Did you ever have any problems with the mask getting a seal in the 100 fires you went to?

A I never had a problem.

Q How often were you tested in the multi-unit test in your company?

A For two years we firemen work approximately one-fifth of the time, I would say at least one-fifth of all the weeks and probably more than that since I made a lot of mutuals during the week and worked a lot of extra weekends.

Q What kind of mutual multi-test is that with respect to the mask?

A You don the face-piece, close off the air pocket, close off the air-valve, breath in and the mask has to go in.

Q Collapse?

A Collapse, that is the word.

Q Did you pass all those multi-tests?

A I passed every one.

Q Did there come a time when you were sent to Welfare Island for testing of the mask?

A I was down in Welfare Island for training and they pulled me out at that time and they asked me if I would take a mask test.

Q Did you have a beard at that time?

A Yes, I did.

Q What kind of test did they give you?

A They called it a banana oil test.

Q What did they make you do?

A I went over to the mask service unit, and I believe Captain Ford gave the test. He asked me to put a Skott Air Pack with the mask, with the face-piece. I ran around the courtyard, and then they took this banana oil and they put it on a cotton swab and they swabbed it at arm's distance, and they went around the whole outside of the mask and I did not feel a thing. They told me I passed the test.

Q What did you feel when you took the mask off?

A When they told me to take the mask off there was a tremendously irritating cutting type smell.

Q Did you have long hair or hair that was in violation?

A Yes, I did.

Q How long did you have that hair?

A At the time the order came down, my hair was down to my shoulders. Before that it was a little longer.

Q Did you ever have any burning of your hair?

A No burning, I have had scorching. I was working with a mask on and with the mask on there is no way you can get a fit on your helmet and I was pulling the ceiling.

Q What do you mean by that, with the mask on? Isn't the helmet made to fit the head?

A The helmet is form-fitting of the head. You have 6 rubber spider straps.

Q When you put the mask on, you do not have a form-fitting hat?

A No, there is no way that the hat can go on, it is balanced on top of the head.

Q Before July 1, 1974, how many men were in your company?

A Approximately 30 men in my company and 30 men in the truck company which shares the same quarters.

Q That is 60 men?

A Yes.

Q What personnel would have been in violation on

June 1st, 1974, under that regulation?

A A minimum of 40 or 50 percent.

Q How many had conformed to the regulation?

A Every last one has conformed.

THECOURT: I did not get that.

THE WITNESS: Every one has conformed to the regulations.

Q Of July, 1974.

What was the circumstances of every one conforming?

A Well, everyone conformed, because they were afraid of their job. They went on legal strike and we got a two-day fine for it, and now they are telling us, if we do not get haircuts, they will fine us 10 days suspension and fire us.

Q So almost everybody conformed?

A Just about everybody conformed.

MR. WEXLER: No further questions -- I have one more question.

Q Do you know of anybody who could not get a seal with the mask because he had a beard?

A No, I do not.

THE COURT: Was there a report on this test on Welfare Island?

THE WITNESS: I was told there was a test report, and I know the date, it was August 29, 1973.

THE COURT: Is there any such report of this man taking a test at Welfare Island with a beard?

MISS CARROLL: Excuse me, your Honor, I did not hear.

THE COURT: Is there any such report of this man taking a test with a beard and a mask at Welfare Island?

MISS CARROLL: I do not have any such report. I believe the Commissioner testified about it yesterday, so I could get the information as to that.

THE COURT: I want the report, insofar as what the circumstances were under which you took it.

CROSS EXAMINATION

BY MS. CARROLL:

Q Mr. Kamerling, can you tell us when you had this full beard, did you have, at the same time, very long hair?

A Yes, I did.

Q How long was your hair?

A As I said, at the time of the order, when it came out, my hair was down to my shoulders approximately and before that, it was longer.

Q When you put the mask on, when you were involved in fire-fighting, where did you put this long hair that you had?

A Where do I put the long hair?

Q Yes.

A My long hair goes down my rubber coat.

Q I see.

As you are busy in fire-fighting, have there been instances where this hair has come out from under that coat?

A Your collar comes up very high.

Q Well, that does not answer the question. Has your hair come out?

A Not to my knowledge.

Q How did your hair get singed? You testified previously, your hair got singed. How did it happen?

A I was pulling the ceiling in the cockwalk, which is above the top floor of the building, and I was wearing a mask. The only way I could get in there was with the mask. The helmet is balanced on top of your head and I pulled the ceiling, and as I pulled the ceiling, your natural instinct is to bow your head so you do not get anything in your eyes and as I bowed my head, my helmet went off because of the mask and at that time, the whole

lit ceiling came down on my head.

Q And your head was not even singed?

A It did not ignite at all.

Q It singed?

A When I came back to quarters, it was singed.

Q From your personal experience, do you know of other fire fighters whose hair has singed in their fire fighting duties?

A I know of no one who has been burned, but I know of singes.

Q The question was, do you know anyone whose hair was singed? Could you please answer the question?

A Yes, I know of people whose hair has been singed.

Q Thank you.

Would you say that is fairly frequent an occurrence in the fire department from your experience?

A No.

Q How often, would you say, from your experience that you have noticed that personally to yourself, that your hair was singed?

A On a few occasions, twice that I know of.

Q Twice that you recall?

A That I recall.

Q Have there ever been times when, in fire fighting, you have lost your mask or had to take your mask off?

A That I had to take my mask off?

Q That you have taken your mask off.

A Numerous times. At the end of the job, you take your mask off.

(Continued next page.)

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Q Would you say in having to do that that having a beard and exposing it to a heat situation would heighten the probability that your hair would singe?

A No.

Q Why wouldn't you say that?

A When you are taking off the mask it is usually at the point of the job where the smoke is down and the heat dies down before the smoke and at the time the fire was already out.

Q So you say you never had occasion to take off a mask in a heat situation so you could not even envision whether or not it would have an effect on your beard.

A Well, you are not using the mask in every fire. I have been in numerous fires with at least the equivalent of heat, possibly greater, without the masks.

Q In those situations did your hair on your face singe?

A No, never.

Q Would you describe the occasions when the hair on your face did singe?

A I never had singed hair on my face.

Q Where did the hair singe?

A On the back.

Q Would you describe the circumstance of that?

A When I pulled the ceiling.

Q That is the only time -- you say twice.

A I also singed hair on my arm.

Q How did that happen?

A At the end of the job all the hair on my arm was singed off.

Q How long was your hand exposed when that did happen?

A I have no idea. In other words, if you burn, okay, you will know about it. If you singe you might not know about it until the end of the job. In other words, when I went back to quarters and washed up, the hair on my arm was singed between the glove and coat probably.

Q There would be a reasonable implication that the singing could happen so rapidly that you would be totally unaware of the happening since you did not realize it until you got back into the fire headquarters.

A Fire fighting is a total --

Q Would you answer the question yes or no? Would that be a reasonable implication?

A You want to repeat the question?

Q Would it be a reasonable implication singing is a very rapid and immediate process since you are not aware of it happening until you return to the fire headquarters?

A No.

Q It would not be?

A No.

Q Why wouldn't you be aware of it?

A It is absolutely painless. If you do not feel it and your mind is on one thing, I couldn't tell you if it was rapid or not.

Q Mr. Kamerling, are you trying to lead us to believe that the burning of hair takes a substantial period of time?

A I have no idea.

Q You have no idea?

A How long burning of hair takes.

Q You have been a fireman and you have no idea how face hair or on your hands, how fast it would burn?

MR. WEXLER: Objection, it is argumentative.

THE COURT: Yes, it is argumentative.

Q You heard the Fire Commissionér's testimony yesterday with respect tothe tests that are performed on Saturday as to the use of the masks. Can you tell us, Mr. Kamerling, do you know what a photometer is?

A No, I do not.

Q A photometer is a device used to detect leakage. You never used those on your Saturday morning tests?

A No, we have three basic tests of masks.

Q It does not include a photometer?

A I never heard of a photometer.

Q So then in fact you use less than the most scientific device as to whether or not there is leakage? I am not finished with my question. You use less than the most scientific device --

MR. WEXLER: I am going to object.

THE COURT: She has not finished her question.

Q When you test on Saturday mornings you use less than a scientific device for determining --

A We use the most scientific devices given to us by the New York City Fire Department.

Q The basis for the test is to detect whether or not there is a hole in the mask as well, isn't that one of the functions of this test or whether the mask is operable?

A I was told the test is to determine the working conditions of the mask, whether or not you get a seal, that is what is written on the training manual.

Q One of the working conditions whether or not it is operable?

A I assume the mask is tested for its being operable at the beginning of every tour. We only don it and test its performance on Saturday so I would assume the

Saturday test is basically to make sure we get a seal. There is testing on the other thing on the beginning of every tour.

Q You heard the testimony of the Fire Commissioner yesterday in Court, did you not?

A Yes I did.

Q And he stated at that time that the NASA study supports the conclusion that leakage of a face mask increases proportionately to the amount of hair that a person has on his face. Do you disbelieve that contention?

MR. WEXLER: Objection.

THE COURT: It is immaterial what he believes or not.

MS. CARROLL: Apparently in his allegation in the complaint he does.

THE COURT: It does not make any difference what he believes.

Q Do you believe there is no risk at all in having a beard and hair on your face in the usage of the mask?

A If I believed there was a risk, an added risk involved, I would obviously not have a beard.

Q Wouldn't it be more true to say that you have decided to assume this risk as a personal risk of your own

in view of the fact you believe it is a minimum risk?

A I do not believe it is any risk. I have been tested by the New York City Fire Department, both regular tests and a special test at the mask service unit and they told me it was satisfactory and I believe it.

Q You believe that in view of all the facts that apparently were documented as to the fact --

A As far as I know no study was ever done with our face piece.

THE COURT: Which face piece is that?

THE WITNESS: The Wilson type.

THE COURT: The one you wear?

THE WITNESS: The one we wear, the New York City Fire Department.

Q The one tested was comparable to the City one?

A I do not know.

MR. WEXLER: Objection. He does not know.

THE COURT: No, he would not know.

Q When you use the face mask with your beard do you use the emergency valve in releasing the air?

A You are not supposed to use the emergency valve unless there is an emergency. I have never been called upon to use the emergency valve.

Q You never have?

A I never had, thank god.

Q Have you ever been in fires where you have in any way adjusted the face mask to accommodate the need for air?

A Not the need for air, no.

Q Incidental to use to having the beard you never changed your usage?

A No, I never had a call to change it.

MS. CARROLL: Thank you very much. I have no further questions.

THE COURT: Next witness.

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Cantello

RICHARD CANTELLO, called as a witness, having been first duly sworn by the Clerk of the Court, took the witness stand and testified as follows:

DIRECT EXAMINATION

BY MR. WEXLER:

Q Mr. Cantello, you are a fireman, right?

A Yes, sir.

Q How long have you been a fireman?

A October 6 will be 12 years.

Q How long have you had a beard?

A Approximately 3 years.

Q How about the length of your hair?

A At various times, down to my collar, and sometimes longer, down to my shoulders.

Q By the way, did you graduate from college?

A Yes, I have.

Q Which college?

A Stony Brook University.

Q Which engine house are you assigned to now?

A Ladder 167 Francis Lewis Boulevard and 35th Avenue, Queens.

Q Before that, where were you?

A Ladder 111, 495 Lewis Avenue, Brooklyn.

Q How many calls does your company respond to in the place you are now?

A 6,000 runs a year. We are the busiest fire-house in the City.

Q What percentage of men would have been in violation of the July 1st, 1974 regulation of your unit?

A Approximately 30 to 40 percent.

Q And you had a Van Dyck beard?

A A Van Dyck beard.

Q How far did it come down?

A It was about 3 or 4 inches out.

Q Did you ever have any problem with the seal of your mask?

A No, sir.

Q Did you use the mask?

A Yes. In the time that I was there with the beard, about 20 or 30 times I have used the mask.

Q Ever have any problem?

A No, sir.

Q Ever have any problem with burning of your hair?

A No, never.

Q Do you know of anyone who could not get a seal because of the beard condition or sideburn condition?

A No, sir.

Q In all the time you have been in the department?

A No, I have never heard of anybody having trouble with the seal with the beard.

THE COURT: Does anyone have any of those masks available?

MR. WEXLER: We could not get one to be tested, your Honor.

THE COURT: I am not a fireman. The only mask I know is the mask in the Army and I have nc idea of any other type of mask, and that was a gas mask or whatever that was. Is there the -- Is the mask being delivered to this Court so the Court can see what we have been talking about?

Q Did you go through the multi-unit drill too?

A Yes, approximately once a month.

Q You tested for a seal and you had your Van Dyck on?

A Yes.

Q Was it satisfactory?

A Yes. The most recent time is two weeks ago. I brought to the attention of the officer that I had a seal.

Q Did you have your Van Dyck on?

A Yes.

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Q Did the officer test you?

A Yes, he said let us see the seal and I hit it and he said okay.

Q He said okay?

A Yes.

MR. WEXLER: No further questions.

MISS CARROLL: With respect to the production of the mask, since it is our position that although the plaintiffs are able to maintain some sort of a seal, satisfactory seal, that since the studies show that the best seal can be effective in the absence of a beard, that there is no point in a demonstration.

THE COURT: I understand the studies apply to some other types of masks or another mask, a different type, a different name.

MISS CARROLL: It is not another type. There has been no expert testimony by the plaintiffs to substantiate this is a different mask.

THE COURT: Do I understand you do not want to produce the mask? It is all right with me if you do not want to produce it.

CROSS EXAMINATION

BY MISS CARROLL:

Q Mr. Cantello, how long have you been in the fire department, did you say?

THE COURT: As I understand it, for the record, no matter what mask we are talking about, whether or not the mask, after being tested on people that we are speaking about with beards, could be sealable, number one, if I can coin that word, and we are talking about an item I do not even know what the item looks like. I have not the slightest idea what we are talking about. I am supposed to make a determination whether that mask will seal on every one's face that does not have a beard.

MISS CARROLL: I would want to confer with the Fire Commissioner about it.

THE COURT: I do not know what the Fire Commissioner has to do with it. He does not run the courthouse. He is a fine man, an honest man, but he still does not run the district court of the Eastern District of New York and I am the one who runs this courtroom.

MISS CARROLL: If I can complete my thought, I will speak to the Fire Commissioner about it. Perhaps we will bring that in in terms of our rebuttal case. But I would prefer to speak to him

about it.

THE COURT: I do not know what he is going to do. I cannot see why demonstrative or physical evidence cannot be brought into court if we are talking about it. There is nothing wrong with it. You are asking me to assume that I know what a mask looks like and I do not know, for the record, I do not know. I have never worn one or never seen one.

MS. CARROLL: I am asking you to rely on the expert since you are not an expert in that field. That is the gist of our case.

THE COURT: I can determine not only from the experts but from the persons who have had occasion to put the masks on their faces and whether or not the mask is what you say and it cannot be sealed. There is no controvery here.

MS. CARROLL: Your Honor, I would prefer to bring it out on the rebuttal case. I do not have the mask here now.

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Q How long did you say you have been in the department?

A 12 years on October 6 this year.

Q And can you tell me how often you have been absent on a yearly rate for that period?

A How often on a yearly rate?

Q Yes.

A Absent for what?

Q Absent from duty for sickness?

A I could not tell you actually.

Q Would 25 times a year, would that be an approximate figure?

A No, not for 12 years.

Q Would you be surprised to hear --

MR. WEXLER: It is immaterial.

THE COURT: What has that to do with sickness? Are we talking now about fire sickness?

MS. CARROLL: Yes.

Q Isn't it true that you have been absent for smoke inhalation, for gastro-intestinal ailments, for a smoke inhalated stomach upsets on numerous occasions?

A Yes.

Q Would it be reasonable to ascribe some of these absences to the inhaling of smoke during your tours

of duty?

A Whenever I went on sick, on my tours of duty at a fire, it was due to the fire.

Q During all this time, how long have you had this beard that you had?

A Approximately 3 years.

Q And so then, during the last three years, you have, in fact, had a beard?

A Yes.

Q While you were working? And how many times have you been absent for smoke inhalation during the last three years, do you recall?

A During the last three years, well looking back to last April, when I came into ladder 167, I do not think I have been absent at all with smoke inhalation.

When I was with ladder 111, quite a number of times when I got smoke feed at a fire.

Q Have you ever had long hair while in your employment in the Fire Department?

A Yes.

Q How long was your hair?

A My hair was down to my collar and sometimes down to my shoulders.

Q Down to your shoulders?

A Yes.

Q Did your hair ever get burned or singed?

A No.

Q Your arm hair?

A No.

Q Has any hair on your body or your face or your head or arms ever been singed?

A Not that I remember, at a fire, no.

Q Excuse me?

A No.

Q What was your response, at a fire?

A Yes, whenever I went to a fire, I never got singed.

Q Have you ever had any burning of your beard at all when you have been at a fire?

A No.

Q When you do these mask safety tests on Saturday morning, is there any scientific measurement of leakage of air in or out of the mask?

A Not that I know of.

Q Is there any device to measure that at that time?

A No.

Q So it is a seal then, for purposes of

adhesion to the face, but not for purposes of detecting leakage in or out of the mask, is that right?

A I do not know. I am asked to get a seal, and that is what I try to get.

Q That is the purpose of the test, but it does not measure leakage in or out of the mask?

A I do not know what it measures. I cannot tell you what it measures.

MS. CARROLL: I have no further questions.

REDIRECT EXAMINATION

BY MR. WEXLER:

Q Were you ever out sick because the seal of your mask didn't work?

A No, sir.

MR. WEXLER: No further questions.

THE COURT: You may step down.

E D W A R D M O R A N , called as a witness, having been first duly sworn by the Clerk of the Court, took the witness stand and testified as follows:

DIRECT EXAMINATION

BY MR. WEXLER:

Q Are you a fireman of the City of New York?

A Yes, sir.

Q How long have you been a fireman?

A 4 years 8 months.

Q The hair in the condition it is now, do you go on the job with the hair in that condition?

A It was shorter, but it was longer also. It has been this length, I would say, for about 3 years.

Q How many men are in your company?

A Approximately 25.

Q Before July 1, 1974, how many would be in violation of the ordinance, the regulation of July 1, 1974?

A 25 percent.

Q How many times did your company go out to fire calls last year?

A I do not know the exact figure. I would say it is about one-fourth the amount of times Neil's company went out, because we are a quieter company. He is a lot busier. I could not say exactly.

Q Did you have to put on the mask with the goatee you have?

A Yes.

Q How long have you had a goatee or a Van Dyck?

A Four years.

Q How about the sideburns?

A 3 years.

Q The mustache?

A 9 years.

Q Did you ever have a problem getting a seal?

A Never.

Q Did you go through the multi-tests?

A Yes.

Q Did you pass them all?

A Yes.

Q Show the Court, first of all, how the helmet goes on and what you do with your hair in the back of your head?

A The helmet is put on like this (witness put on firehat) and the coat goes over my hair when I put it on.

Q Are there flaps in the helmet?

A Yes.

Q Would you show the flaps extended?

A (Indicating with flaps out.)

Q That covers the ears completely?

A Yes, the ears.

Q Would you show us how you wear your hair when you put your coat on?

A (Witness put on fire coat.)

Q Did you ever have your hair burn?

A May I take this off first?

Q One other question, that hat now, is a perfect fit, is that right?

A Yes.

Q When the gas mask is on, do you get a perfect fit?

A No, not perfect, because the mask is in the way of the helmet.

Q The straps go over your head?

A Yes.

Q And that interferes with the so-called perfect fit?

A Of the helmet.

Q Did you ever burn your hair?

A Never.

Q Ever singe it?

A No.

Q How about the Van Dyck and mustache?

A No.

Q Were you ever out sick because of not getting the seal?

A Never.

MR. WEXLER: No further questions.

CROSS EXAMINATION

BY MS. CARROLL:

Q Mr. Moran, when you are fire fighting and you have your gear on, as you demonstrated, how do you hear?

A How do I hear? In summertime we do not usually use the earflaps. In the winter we use them. It is a little difficult to hear when the flaps are on.

Q And so, in fact, you do not wear this, you would not wear this coat in the summertime, would you?

A The coat?

Q With the flap up in the summertime, would you?

A I would if I was going into a fire, I would to protect myself.

Q Wouldn't it be unusual? Would you be ordered not to do that in hot weather so as to prevent heat exhaustion?

A They tell us we cannot remove our coats unless it is 83 degree temperature outside. Up to that point, we must wear our coats responding to and from a fire.

I would not be ordered to wear my coat right there.

Q So then, in New York City, in the summer, it

would be more often you would not have your jacket with the collar up as you just demonstrated?

A If I go to a fire, my collar is up. If I am riding on a rig, coming back from a fire or responding to a fire, I would probably have it down. If we approach the place and there is a fire on, it is up.

Q With respect to having your hair down, your jacket, wouldn't that exceed your ability to move, having it caught under your collar?

A It has not.

Q That has not been your experience?

A Right.

Q Has your hat ever fallen off and exposed your hair?

A Not that I recall.

Q You can envision that as a possibility in fire fighting, certainly.

A If my hat fell off, it would expose the top of my head.

Q You can imagine, I presume, a situation where your pony-tail, in fact, might come loose from your coat in fire fighting?

A Possibly, yes.

Q And in such an instance, a full head of hair

like yours would singe rather rapidly, wouldn't it?

A I do not believe so. It has never happened to me and I do not know anybody it happened to.

Q The fact it does not happen, does not mitigate the probability.

MR. WEXLER: It is argumentative.

THE WITNESS: I do not know whether it does or not.

THE COURT: Yes, it is argumentative.

Q Have you ever had your hair singed or your hands?

A Not that I know of.

Q Any hair singed, your eyebrows ?

A At a fire, no.

Q Where have you had it singed?

A I did by lighting a cigarette I singed my mustache once or twice.

Q It is a pretty rapid operation, singing?

A Singing --

Q It is immediate, isn't it?

A I guess, if you put a flame to it, it is immediate, yes.

Q Or very sensitive to heat, it would be immediate?

A No, I do not think so. I have been in, approximately being conservative, 50 fires where there was heat and smoke and I have never had any problems, never been singed, that is all I can say.

Q Well I would rather you answer the question. If you hat fell off, isn't it a reasonable possibility that in an instance of fire, a full head of hair would singe rapidly; yes or no?

MR. WEXLER: Objection, your Honor.

THE COURT: I do not think that is in question form.

MS. CARROLL: He is relating his experiences, your Honor, he is representing his experiences as a fireman.

THE COURT: It is a speculative question.

MS. CARROLL: It is hardly speculative in view of the fact he is a firefighter and deals with this kind of situation all the time.

THE COURT: You do not feel it is speculative?

MS. CARROLL: I ask your Honor to take judicial notice of the fact that hair singes rapidly.

THE COURT: If you do not feel it is speculative, I will let him answer it.

THE WITNESS: You said if my hat fell off

the top of my head, it would expose my hair but my hair would be behind the coat. If a direct flame was put on my hair or skin or anything, it would burn, wouldn't it? But in heat situations, I have never been singed.

Q You said that when you do your Saturday morning tests of the mask, you have been able to effect a seal. Can you define what is a seal?

A Given a test, you put your mask on and there is a tube, a breathing tube, and you cover the end of the tubeand inhale, and if the mask collapses, you are supposed to have a tight seal and you are able to fight fires.

Q But at no time in doing this procedure for testing the mask have you used any device which scientifically measures the leakage of air, have you?

A No, not that I know of.

Q Or the intake of any other kind of gas into the mask?

A No.

Q So in point of fact, you do not know as a fact from this test, whether or not air comes in or out of your mask; yes or no, do you know?

MR. WEXLER: I think he has a right to answer.

MS. CARROLL: I asked whether he knows for a fact.

THE WITNESS: Is this a scientific test you are talking about, scientificly?

Q Yes.

A I am not a scientist, I do not know.

But according to the New York City Fire Department mask test, I passed.

THE COURT: He cannot answer scientifically. He can answer a question as to a test made on him, he cannot answer for anybody else. He is here to testify what a mask does on his face in this condition and that is all I will accept.

MS. CARROLL: He has created an inference this is --

THE COURT: You created the inference, he merely answered.

(continued next page.)

MS. CARROLL: I would like to please finish my statement.

THE COURT: You can finish anything you want,. but when I make a ruling you have to abide by it.

MS. CARROLL: I would like to explain the purpose of my question.

THE COURT: I understand your question. I am interested in what he says he tested, not what a scientist tested. That's not what he is here for. Not at all.

Q For the purpose of your previous statement that you have been able to effect the seal, you're saying you have been able to effect the seal from your own observation but you have not scientific information to substantiate the statement that you have effected satisfactory reseal?

Right.

MS. CARROLL: Thank you very much.

(Continued on the next page.)

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JOSEPH J. ANASTASIO, having been called as a witness, was duly sworn by the Clerk of the Court, took the stand and testified as follows:

DIRECT EXAMINATION

BY MR. WEXLER:

Q How long have you been a fireman?

A September 5th will be four years.

Q Where are you assigned?

A Squad four, Brownsville, Brooklyn.

Q How many fires did your company respond to?

A Last year we did 4,000 responses and the year before, I think we did 7800.

Q Are you one of the heavy ones?

A Yes.

Q What type of squad are you in?

A We work either as a ladder company or as an engine company. It's like a man-power pool.

Q With respect to the mask, what is your job there?

A After one o'clock in the morning, we only respond on firest, we cover pa[illegible]s of Bedford Stuyvesant and East New York. When we respond to a one alarm fire, we're told we must don masks, as soon as we come to the scene.

Q So during that period of the morning, you go

to fhe fire with the mask on?

A Right.

Q How many times in your career have you gone to fires with the mask on?

A I'd say I have used the mask about 150 times and on all these all hands-fires, at least 75 times, at least.

Q How long have you had your beard the way it is now?

A I had it on and off for about two years.

Q How many fires have you responded to where you had to use the mask with your beard?

A About fifty.

Q Did you ever have any problem?

A No problem.

Q Has your hair been the same way?

A My hair was even longer.

Q Did you ever singe or burn your hair?

A No.

Q Were you tested for the mask?

A At multi-unit trials, yes.

Q Did they give you any other tests to determine whether you have a seal other than the multi-unit test?

A No.

Q Have you passed them all?

A Yes. Otherwise I wouldn't have the beard.

MR. WEXLER: No further questions.

CROSS EXAMINATION

BY MS. CARROLL:

Q How long have you been in the fire department, did you say?

A Almost four years.

Q Have you had occasion to be abasent for smoke inhalation during that time?

A Yes, I have.

Q Could you tell us how often in the last year for example?

A I really wouldn't know.

Q Could you give us an approximation?

A About two or three or four times.

Q For smoke inhalation?

A Yes.

Q During that period you always had your beard? Is that correct?

A Yes.

Q Because you maintained you had a beard for two years.

A On and off for two years.

Q Was it mostly on or mostly off?

A It depends.

Q You would have to be the one to know.

A Mostly on.

Q During this period of two years, you havehad several absences from duty for smoke inhalation during which period you had a beard, is that correct?

A Yes.

Q With respect to your previous statement that you were able to effect a seal in your testing of the mask on the Saturday morning session, can you please define what a seal is?

A It's when you put the face piece on, you close off the inhalation valve with your hand and you breathe in and the mask collapses on your face. That's a seal.

Q In doing this test, there was no usage by you, photometer or other any scientific device to detect leakage of air in or out of the mask?

A I never even heard about it.

Q So then the answer is no?

A Yes.

Q Have you ever had your hair burned?

A No.

Q Not on your hands or anywhere else?

A I had my hands burned, but the hair didn't burn. I had blisters on my hands.

Q Perhaps you have inflammable hair?

A It could be.

Q Do you believe the test of the Fire Commissioner with respect to the useage of the mask in the presence of hair? Do you believe that to be untrue?

MR. WEXLER: I object.

THE COURT: Objection sustained.

MS. CARROLL: I have no further questions. I would like to note at this point, that perhaps we can shorten this procedure. If we can effect some stipulation, it appears that the testimony of all of the witnesses --

THE COURT: Will all be the same.

MS. CARROLL: Yes, repetitive.

THE COURT: Do you have any other witnesses?

MR. WEXLER: I have a few others that will be the same. I can stipulate there is no record of anyone not having --

MS. CARROLL: As to your witnesses the content. We have rebuttal witnesses who will testify. As to your witnesses they will say pretty much the same thing.

MR. WEXLER: Yes.

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MS. CARROLL: I don't see the purpose for this cumulative information.

THE COURT: I don't either. I have no objections to stipulations. Do you stipulate that if anyone of the firemen put on the stand in the same appearance as the one on the stand would testify that he obtained a seal with the mask, and number two, that his hair is not singed or that it effects him in going into a fire without conceding the truth thereof?

MR. WEXLER: And they have no problem with the mask.

THE COURT: Without conceding the truth of it

MS. CARROLL: Also on cross-examination they would assert that they used no scientific instruments ---

THE COURT: Other than the test we're talking about.

MS. CARROLL: Right, in coming to or effecting a seal.

MR.WEXLER: I will so stipulate to that.

THE COURT: All right. It's cumulative and nothing more.

MS. CARROLL: May we have a recess?

MR. WEXLER: I have mor witnesses to present in addition to that.

THE COURT: I want to take a recess.

MR. WEXLER: I'm sorry, your Honor.

THE COURT: You mean you're falling into that category?

MR. WEXLER: No, your Honor.

(Whereupon a recess was taken.)

(Continued on the next page.)

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(After the recess.)

ROBERT ULMER, having been called as a witness, was duly sworn by the Clerk of the Court, took the stand and testified as follows:

DIRECT EXAMINATION

BY MR. WEXLER:

Q How long have you been in the Fire Department?

A Six years this September.

Q Prior to July 1, 1974, did you have a beard?

A Yes, sir.

Q How long did you have a beard?

A Five years.

Q Was it a full beard?

A Yes.

Q Did you go through the multi-unit test?

A Yes, sir.

Q Did you get a seal all the time?

A Yes.

Q Did you go to Welfare Island for a special test?

A I was detailed by my captain to repair masks, which means I took the damaged face pieces from our company to Welfare Island, and reporting -- upon reporting to Welfare Island, I was asked by the captain if I would undergo a test to see if I could get a seal on the mask.

At that time I underwent the test and passed it, and he asked me to take the test again after running around the apparatus floor. I ran around the rigs and did it several times, and came in a little winded and took the test again and passed it again.

Q That was with the banana oil at Welfare Island?

A Correct.

Q Did you ever have any problems in getting a seal with the beard on?

A No, sir.

Q Do you know anybody who has?

A No, sir.

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CROSS EXAMINATION

BY MS. CARROLL:

Q When you were taking the test you mentioned the banana oil test. What kind of a beard did you have at that time?

A A full beard.

Q Substantially fuller than you have now?

A Oh, yes.

Q What were you doing during the test?

A Well, the inhalation of the -- the inhalation valve of the mask connected to a bottle that's stationary at the bench, so you have to stand there.

Q So there is no movement. You don't move your head or body or didn't do anything at that time, you just stood still, is that correct?

A Yes.

Q Would that be the usual situation in a fire, that you would be standing still and wearing a mask? Yes or no.

A No.

Q In fact, in a fire you would be subject to extreme activity and movement, wouldn't you?

A Yes.

Q So that this test wouldn't really show how effective the mask would be in a situation comparable to a fire situation, that is a situation of increased activity?

MR. WEXLER: Objection. It's they who made the test.

THE COURT: I will allow him to answer if he can.

THE WITNESS: I am a fireman, not a test expert.

Q Exactly. But you have stated this test was performed and you were absolutely stationary, and that's not the situation when you use the mask at a fire. Is that correct?

A Yes.

Q Would you define a seal for us?

A Well, the seal you undergo during the multi-drill or any time that you're asked to test it by officers, you place a mask on, you tighten up the spider straps, and you have a test by covering over the inlet valve or inhalation valve of the mask, and by using your lungs to inhale you can cause the mask to collapse. If you have a leak the air will leak in the side of the mask, and you will not be able to collapse the mask.

Q When you're doing this procedure that you just mentioned, you are standing still, aren't you?

A Yes.

Q You're not moving around or doing anything that you would do if you're on fire operation.

A Correct.

Q It would be fair to say that the circumstances of this test operation procedure is not comparable to the conditions incidental to fire-fighting?

A Correct.

Q And in terms of -- you mentioned leakage. There is no device, scientific device used at that time that would indicate to you whether or not leakage occurred? Is there?

A They only perform the test as far as leakage.

Q As you stated and there was no device to measure

it at that time?

A That's right.

Q So that if I understand your test it's this: That if you performed this test under circumstances that are substantially different from the fire-fighting circumstances, and when you perform it, you don't have the aid of a scientific device, is that true?

A Yes.

MS. CARROLL: That's all.

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CROSS EXAMINATION

BY MR. WEXLER:

Q When you wear a mask in a fire, do you work or do you stand still?

A I have done my work for approximately six years now.

Q When you're wearing the mask is there excitement, movement?

A Yes, sir.

Q Do the masks work under those conditions?

A Yes.

RECROSS EXAMINATION

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BY MS. CARROLL:

Q You responded that the mask works under those circumstances. What do you mean by that?

A Well, I am an instructor in scuba diving and when you don't get air ninety feet underwater and it's not working, and if you are in a fire with a mask and you cannot breathe, and you are smelling smoke, then it's not working.

(Continued on the next page.)

M:pc
am/2

Ulmer- cross/Carroll

Q In fact by saying that, it is working, you are not saying there is no leakage, you are just saying there is sufficient oxygen to survive purposes that you have noted?

A Prior to putting a mask in operation, I test to see if there is any leakage. At that time I go on the mask.

Q What would you do in the instance of a case that is odorless, like carbon monoxide? You wouldn't be able to detect that?

I wouldn't be here, either.

Q You wouldn't be here to make that statement?

A No.

Q With respect to the seal, when you are moving around in fire fighting, isn't it possible that the mask would move around with you, that it might move loose from your face?

MR. WEXLER: Objection.

Anything is possible.

A It is possible.

Q Has it ever happened that your mark has moved in any way on your face?

A Again I say it is possible. Towhat indication do you mean? It didn't work, or I lost the seal?

Q Did it move around on your face?

A It has been ripped off me.

Q So it has moved, if it was ripped off?

A Yes.

Q What was the circumstance where it was ripped off?

A Well, somebody needed air, and they ripped it off me and tried to get out and we were right by the door and we both fell out so we really didn't need it.

On fire conditions, when you go in a building, it is usually a doorway, and sometime the first man is gasping for air and a truck man is there and I am an engine masked man, and I am preparing to don a mask and one man was going out and he took me by the helmet and my body and mask came off.

Q In moving you out the door, the mask came off?

A Yes.

Q So that the mask moves around substantially in your operative use of it?

MR. WEXLER: I object.

THE COURT: Sustained. It is conjectural.

MS. CARROLL: Hesaid his mask was ripped off and I would like to know how.

I would like to know how.

Are you saying he cannot answer that?

Ulmer- cross

THE COURT: I said there is an objection by his lawyer and he should not answer until I have a chance to rule.

MR. WEXLER: There is a question that I objected to.

THE COURT: What was the question?

MR. WEXLER: She said your mask came off, so therefore the mask does move and there is a possibility the mask moves.

THE COURT: Objection is sustained.

Q Describe the circumstances when your mask moved.

A When it moved or ripped off?

Q Either.

A When it was ripped off, I was in a doorway and a fireman was approximately or -- was in the neighborhood of 180 or 200 pounds, as usual, and he was gasping for air because he didn't have any, and he went charging through that doorway and took me, my mask the bottle and helmet, and pushed back because he is looking to get air, and there is no breathable air to him.

Q On any other circumstances under any other conditions, has your mask moved from your face?

A No, not that I know of.

Ulmer- cross

Q Has never shifted or moved in any way on your face that you know of in your movements?

A It possibly could have shifted. I wouldn't know about it, because I never had the mask fail on me or become inoperative.

Q That wouldn't be the definitive test of it, the fact that it moved and works?

It could still move and work, couldn't it?

A Yes.

MS. CARROLL: That is all.

REDIRECT EXAMINATION

BY MR. WEXLER:

Q You said your were a scuba diver instructor?

A Yes.

Q Did you have your beard on when you were a scuba diver?

A Yes.

Q You go down in great depths of water?

A 90 to 100 feet.

Q As a scuba diver, or you as a scuba diver, do you get a seal on your beard?

A Well, it is a different piece of equipment.

Q Do you get a seal with it?

A Yes.

Q Do many of your friends who scuba dive have beards?

A I would say a majority.

Q And they go in great depths of water?

A Yes.

MR. WEXLER: That is all.

RECROSS EXAMINATION

BY MS. CARROLL:

Q Would you say that from your experience and use of the mask, you would be able to detect the inflow of an odorless gas like carbon monoxide?

A I couldn't detect it if I didn't have the mask on. You said it is odorless. The first indication the job has indicated to me is weakening of the knees for carbon monoxide. That would be my test. It wouldn't be with the mask.

Q Would the presence of the mask on, if there was any seepage at all, carbon monoxide could build up and you would be totally unaware of that.

Is that correct?

A As far as the mask is concerned.

Q That is what we are talking about, the use of the mask.

A Right.

Ulmer-recross

Q You would agree that the movement of your face might allow or excessive movement of your face and body might allow for the input of any kind of air or gas in the mask? Would you agree to that?

A No, it would have indicated that I had smoke in my mask.

Q I didn't ask you that.

MR. WEXLER: Let him answer.

A I am sure smoke and carbon monoxide doesn't know the difference, whether I wanted them in there or not. If I had smoke in there, I am sure carbon monoxide would have sneaked in there too.

MS. CARROLL: That is all.

THE COURT: Step down.

J O S E P H C O L L I N S, called as a witness, having first been duly sworn by the Clerk of the Court, took the witness stand, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. WEXLER:

Q How long have you been a fireman?

A 7 years.

Q Approximately a year and a half ago at the

Commodore Hotel fire, did you have a beard?

A Yes, a full one.

Q When you went into that fire, were you wearing a gas mask?

A I was wearing a Skott mask, yes.

Q Tell us the circumstances of that.

A It was in the Davega Sporting Goods store in the Commodore Hotel, my company was asked to advance a line into the cellar level, which was a subway entrance to the store, and there was where the main body of the fire was.

There were three lines advancing in there and the nozzle we had on our hoses, the type we normally use on a handline. It is used on a large caliber stream and it cannot be shut down, but only vary the pattern on it. I went out to change my Scott bottle and relieve my company on the line, and I don't know how the situation came about but I was the only one on the line. I was in there by myself, and apparently the two other companies in there were ordered out.

After a while, realizing I was alone and was in a sitting position on the floor, with the line on my lap, attempting to get to a kneeling position, I reached over and knocked my helmet off. I couldn't see three inches in front of my face.

I tried to find my helmet and could not. I took the nozzle to secure it to the floor and I left the two and a half inch line off the floor and stuck the nozzle under it and put the two and a half inch nozzle on it and attempted to find my helmet once again, but could not.

There was two or three inches of water on the floor which was hot when I put my hand in it and I lost a glove by shaking it off, and I became panicky.

I was on a pile of hose and didn't know which way was out. I was sucking wind like the end was in sight.

At no time did I draw any smoke in around that mask and finally my tack alarm was going off, indicating that my air supply was getting low.

This caused me more apprehension, and I breathed harder, but still I didn't draw any smoke.

I finally found my way out and I found out it became so hot in the room that I got a minor burn on the top of my ears and the top of my head and nowhere was I covered with hair did I sustain a burn. I didn't even get a singe on this fire.

Even though I was totally exhausted, I completed the tour of duty.

Q How long were you in that smoke place moving around under commitment and excitement of breathing hard

and panicky?

A 10 to 15 minutes.

When I first went in I had two companions and their pack alarm went off and they went out.

Q With all that excitement, with all that anxiety, the seal did not break?

A Not to my knowledge. I didn't breath any smoke.

Q Whose arms did you fall into when you got out of the building?

A Chief O'Hagan was standing there when I got up to the doorway.

Q You say you burned the top of your head?

A Yes.

Q You didn't have hair on your head then?

A No. The area that the hair covered was not injured.

MR. WEXLER: That is all.

CROSS EXAMINATION

BY MS. CARROLL:

Q Do you recall at that time, during your very heroic service, was your hair wet? Did it get wet?

A I am sure it must have, more from perspiration than anything else.

Q That might be a reasonable explanation?

A Possibly.

Q For why it did not burn?

A Possibly.

Q How long did you say you were in that situation?

A It seemed like two hours but I said 10 to 15 minutes.

Q During that time, I guess you were exerting really substantial respiratory function?

A Yes.

Q Do you know how long the Scott Air Pack is supposed to last?

A It depends. I believe the depth says 20 minutes.

Q I believe the depth says 15 minutes under real stress situations.

A Yes.

Q You have no way of knowing whether or not the presence of the beard length tends to shorten the time that you had the air flow? You wouldn't know that, would you?

A No.

Q You would have no way of knowing the -- what the effect of the beard was on your ability to use the air in the

mask; is that correct?

A As far as I could tell, it had no effect.

Q You have no real way of knowing that?

A It worked to my satisfaction. I got out.

Q When you were moving around doing all this, did the mask move around on your face?

A I don't believe it did. It is a very soft rubber and six straps hold it on. I guess there is a possibility, if the mask didn't fit properly, the rubber could buckle, but I never saw it happen.

Q If the presence of hair was to create a situation where air would seep in, if that were true, would you agree that moving around under a stress situation like you were in would add to the seepage, if you didn't effect a perfect seal?

A I would say the greater exertion, if there is a leak, naturally you will draw whatever atmosphere is outside.

Q When you say the amount of facial movement you are exerting now in talking, the facial muscles, that that might affect the fit of the mask in a stress situation as you encountered, or turning or twisting?

MR. WEXLER: I object.

A I don't understand the question.

Q The muscles that you are presently exerting in speaking, would that affect the fit of the mask if you didn't obtain a perfect fit when you first put it on?

MR. WEXLER: If you don't have a perfect fit --

A If I didn't have a perfect fit, I wouldn't go in. I would stay there until I adjusted the straps.

Q You wouldn't know whether you have a perfect fit?

A That is what the test is for. Every time you don a mask you test it.

Q In putting on the mask and doing the seal that you were referring to, you have no scientific, you have no scientific device to tell you you have achieved a perfect seal?

A That is true.

Q You have been able to know you were able to deflate it, and that is the test?

A Yes. If you hold your breath for 15 or 20 seconds, and the atmosphere doesn't come in, you have to assume there is no leak. There are no instruments we have been afforded to indicate this leakage.

Q Would you say in a stress situation, like you encountered, if there was a microscopic leak for a period of time, that such a leakage could put you in an extremely

dangerous situation?

A I really don't know.

MS. CARROLL: Thank you.

THE COURT: All right, step down.

We will now recess.

(A recess was taken at 1 o'clock P.M. for luncheon.)

AFTERNOON SESSION

MS. CARROLL: During the luncheon recess, during my legal research, I became aware of a case called Olszewski, against the Council of the Hempstead Fire Department, 334 New York Supp. 2nd. 504 which was a challenge by a fireman to essentially the same regulations and the regulations were upheld by the Court.

The testimony was to the effect that the fireman was suspended from duty for failure to have his hair comply with the requirements of the regulations in that it extended beyond the hair.

THE COURT: How long ago was that?

MS. CARROLL: June 1972.

During the course of the fire his hair burned completely around the entire back of the skull where the hair was extended.

I can leave a copy here for your Honor's --

THE COURT: I have it inside.

MS. CARROLL: Counsel have agreed that I call one witness out of order. A doctor.

THE COURT: All right, call him.

(continued next page.)

GABRIEL SELEY, called as a witness herein, having been first duly sworn by the Clerk of the Court, was examined and testified as follows:

DIRECT EXAMINATION

BY MS. CARROLL:

Q Dr. Seley, are you employed by New York City Fire Department?

A Yes, I am.

Q What is your title?

A Chief Medical Officer.

Q What duties does that position entail?

A My main function is to supervise the medical Division of the Fire Department and the main purpose of the Medical Division is to maintain the health of every fireman and fire officer.

Q Can you describe your past medical experience for the Court, please.

A I have been a physician now for forty years. I am on the teaching staff as a professor at the Mt. Sinai Hospital Medical School, diplomate of the American Board of Surgery and American Board of Thorasic Surgery.

I have been connected with the Fire Department for more than 22 years. I served as a Major in World War II

3 Seley - direct

with the Mt. Sinai unit for four years, three of which were overseas. I am an active practicing surgeon.

Q As a medical doctor, what in your opinion is the effect of having a beard or excessive hair, especially a beard on injuries to the face including burns?

A In any area of the body where there is excessive hair, there is always a chance of increased infection. This is particularly true of the face with a full beard, because practically any virulent micro-organism or bacteria can be grown from the beard at any time.

Therefore, anytime a person suffers an injury in and around the face, a lacertaion, a fracture, a compound fracture or any severe trauma, the question of infection is immediately brought in and magnified, making that particular injury a complicated one.

In addition to this, the hair of the face, particularly with a full beard is highly flammable and in case of a sudden fire involving the beard complications arise.

Burns can occur involving the eyes, the nose, the mouth and if the beard is suddenly subjected to fire, if the individual takes one deep breath during the time that beard is inflammed he may inhale flame which will burn the pharynx, trachea and even the lungs.

4 Seley - direct

For those reasons, any injuries around the face of an individual who has a full beard carry with them a much more complicated prognosis.

Q Can you comment on the severity of injuries as opposed to the incidents, severity of injuries to the face incurred by firemen?

A Anytime a fireman is injured around the face, serious injuries result because of the actual conditions under which they occur. The contamination from the surrounding smoke and soot, etcetera, plus the unhealthy condition of the air results in more serious injuries than from the average individual in other circumstances.

But the main point is that a full beard will make this injury three or four times more serious because in treating that wound or injuyr, it is difficult to diagnose the extent of the injury of the full beard.

Secondly, if you have to do any suturing or investigating of the wound or cleansing thereof, the entire beard has to be removed.

If there is a fracture and any work has to be done on the jaw,again that beard has to be removed. In the simple application of a dressing, you cannot apply a good aclusive , sterile dressing to an individuals's face who has a full beard.

5 Seley - direct

Q I would like your conclusion with respect to this hypothetical:

If there were two men in a fire, two fire-fighters, one with and one without a beard, if ther was an explosion which would be more difficult to treat?

MR. WEXLER: I object to the form.

THE COURT: I don't think that's the issue here. Whether or not an explosion occurs. It is a question of whether or not a mask fits on the face and seals properly. Otherwise it is for the purpose of grouping--

MS. CARROLL: We are attempting to also present other safety considerations that are involved in the determination.

THE COURT: How many firemen has he treated?

How many firemen have you treated with and without beards?

THE WITNESS: I have treated a number of fire-men who have been without beards and fortunately for the Fire Department the number of men who have had beards has only occurred in the last few years and so far they have been very lucky that they haven't had an incident of this sort.

THE COURT: Would your answer be different if I told you the Commissioner yesterday said the

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beards and long hair problem was greater a few years back than it was this past year?

THE WITNESS: I would'nt say that. Fifteen and ten years ago, my experience goes over 22 years, the incident of beards was few and far between. When it comes to an injury involving a hairy part, particularly face or beard those circumstances will arise.

THE COURT: That arises on the head, too, doesn't it?

THE WITNESS: That's right'

On a head burn in a fireman I recall very well who had his hair burned because of -- because his helmet fell off and the burn was so severe because his hair became inflamed that he lost not only his hair but hair bearing area lost the ability to develop hair and asked for permission to have hair implants done and gave him that permission.

He went to a specialist and when he attempted this he found as a result of the hair that was burned even the folicles had been destroyed and it was impossible to do hair implants. This is the same that applies to any hairy portion of the body, especially to the face.

7 Seley - direct

BY MS. CARROLL:

Q Did the Fire Commissioner consult with you prior to the rules being promulgated here?

A Yes.

Q What advise did you give?

A For the safety of the fireman, any man who goes into a fire with a clean shaven face would be much better off and much safer than a man who goes in with a' beard.

Q With respect to the testimony previously given by Mr. Moran that he goes in a fire with a full coat on, earflaps and a collar up and long hair, a pony tail in fact, stuffed under the collar of his coat, would such attire or outfitting have an effect on the perspiratory functions of the body?

A I am thorougly convinced if a man goes into a fire he already has two problems, one -s the danger of fire and secondly the danger of overheating his body. He has on a rubber coat, boots, covered completely except for his face.

The only chance he has of any effort of lowering his body temperature is by perspiring around the face and neck area. If he has a beard and in order to protect them, covers himself up totally, he is destroying

that one effort that the body is trying to make to cool him down and certainly subject to overheating.

MS. CARROLL: That's all.

CROSS EXAMINATION

BY MR. WEXLER:

Q Before coming here, youwere asked to check on beard-burning cases under your control; isn't that correct?

A I don't know where you got that information.

Q Weren't you asked to check if you know of any cases of beard-burning?

Were you asked that ?

A I discussed the whole aspect of this, not one particular aspect.

Q My only question is were you asked to check for cases of beards burning while fighting a fire?

A I was not asked that question prior to coming to this Court.

Q Were you asked it before, or during court?

A When I arrived at the court I discussed it with several people.

Q You were asked to make some checks and you called some hospitals to --

A I didn't check on that.

Q Do you know of any case of beard burning?

A No specific example.

Q In the 22 years?

A That's right.

Q Weren't you asked whether there have been cases of a man inhalating smoke or noxioux fumes because the seal broke on a beard?

A I have never been asked that question.

Q Do you know of any case?

A I would have to review the records.

Q Offhand you couldn't tell the court one case where a seal broke on a beard in 22 years.

Is that correct?

A I am not an expert on seals.

Q I am asking about inhaltion of smoke or noxious gases. You are in charge of the entire department?

A Yes.

Q You have knowledge of 22 years?

A Right.

MR.WEXLER: That's all.

THE COURT: Step down.

REDIRECT EXAMINATION

BY MS. CARROLL:

Q In treating someone who was injured with smoke inhalation would a medical report that was presented to you

specifically state anything with respect to the seal?

A No.

Q So that the fact of the seal woudl in no way be brought to your attention; is that right?

A That's right.

RECROSS-EXAMINATION

BY MR. WEXLER:

Q If a man was brought in for smoke inhalation wouldn't it say something of how he got it? Wouldn't the histroy say something?

A Yes. It would state whether the man was or was not wearing a mask and if he was not wearing a mask why he wasn't wearing it.

Q If from the field you determined the mask seal was broken that would be in the report, wouldn't it?

A Not necessarily. The only report I get is whether the mask which is impounde d was functioning at that time.

Q You advised the commissioner, you had many cases or some cases of the mask not functioning property you would have a record of that, wouldn't you? There would be a memo or something on it?

You told us you are interested in the safety

11 S[illegible] Cross

of the men.

A All I can tell you I cannot give you any specific examples of that type.

Q You have never made a report to the Commissioner concerning seals breaking because of beards?

A That's right.

MR. WEXLER: That's all.

THE COURT: Step down.

(continued next page.)

12 Hamill - direct

JAMES HAMILL called as a witness herein, having been first duly sworn by the Clerk of the Court, was examined and testified as follows:

DIRECT EXAMINATION

BU MR. WEXLER:

Q How long have you been a fireman?

A Just over four years.

Q What company are you assigned to?

A Engine Co. 41, located in the South Bronx.

Q Before July 1, did you have a beard?

A I wore a beard 30 days after my appointment up until the other day when I had to take it off.

Q In your work as a fireman, do you have to put your mask on a lot?

A Usually every day I go to work I am confronted with a major fire and sometimes two or three times that day I use my mask.

Q Did you ever have a defective seal when you put on the mask with the beard?

A No, sir, I never did.

Q When you go into these fires some two or three times a day with the mask do you stand still or do you do your work?

A Usually our attack is of interior nature.

We may stretch to the apartment door where the fire is located, we don our mask and attack the fire, come inside the apartment and put the fire out.

Qq Tell me what happened on December 3, 1973?

A We responded as second due engine and it was a project fire, the fifth floor, smoke issuing out of the window and a child was waving his arm out the window.

The second ladder company -- well, we were ordered, the second due engine to proceed and don masks, proceed to the fire floor to perform truck operations.

At that time when I reached the fire door it was being forced and a fireman was coming out with the boy. Chief Patson, I was the only man with a mask and I penetrated the apartment deeply. I was searching it and I located Adrian Mason and performed cardiac pulmonary resuscitation when I removed her to an uncontaminated area.

Q Did you get an award for that?

A Yes.

Q Did you have a beard at that time?

A I had a beard all my time in the Fire Department, sir.

MR. WEXLER: That's all.

CROSS-EXAMINATION

BY MS. CARROLL:

Q You stated,Mr. Hamill, that you have never had a defective seal.

A Yes.

Q What in your mind constitutes a defective seal?

A It would be a fireman working in a contaminated area realized instead of breathing air he was contaminating that air in his bottle with smoke.

If I had breathe in smoke or anything like or realized any side effects which wouldmean a leak in the mask would probably constitue a defective seal.

Q With respect to your use of the mask, if there was a leakage, unless it approximated your previous statement you wouldn't know whether or not the seal was perfect one way or the other?

A I would say 99 percent of the cases when using a mask because the area is contaminated with smoke, if there is a slightest leak you will recognize it because smoke really hurts and you know it.

Q Have you ever had that happen to you?

A No.

Q You never had smoke inhalation?

A Yes, at times I didn't use the mask.

Q At no times when you used the mask have you had smoke inhalation?

A That's right.

Q You have never been, you would not be able to detect small quantities of it?

A I think you would.

Q What about carbon monoxide, would you be able to detect small quantities of that?

A No, but if you experience that you would feel weakness, dizziness,which I didn't.

Q It would be possible to have a leakage of significant amount of carbon monoxide without having those effects, isn't it?

A I don't know. You are asking a technical question.

MS. CARROLL: That's all.

P H I L I P M A H N K E N , called as a witness herein, having been first duly sworn by the Clerk of the Court, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. WEXLER:

Q You are with the New York City Fire Department?

A Yes, sir.

Q How long have you been a fireman?

A Seventeen and a half years.

Q How long a captain?

A Six and a half.

Q Before that how long a lieutenant?

A Six and a half years, too.

Q I understand -- by the way, were you served with a subpoena by me to be a witness?

A Yes.

Q Did you refuse unless I subpoenaed you?

A I didn't refuse to come but I am here. I think I would be here without the subpoena.

Q Sometime ago did you have a beard?

A Yes.

Q How long was that?

A A full beard.

It was ordered to be taken off in January of '72.

THE COURT: Are you in a fire-fighting unit?

THE WITNESS: Yes, I am, Elmhurst, Queens.

Q Do you yourself use the Scot Mask?

A Yes.

Q Did you use it when you had a beard?

A Yes.

Q Did it work with the beard?

A Yes.

Q Have you ever had an incident with any of your

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men under you wherethe beard interfered with the seal?

A Never.

Q Did you ever have conversations with other captains or meetings or directives saying that the beard interferes with the seal?

A I once had a conversation with I believe, the second in command of the Bureau of Personnel, Assistant Chief George A. Wallace. That conversation took place because Chief Wallace was interested in my ideas about hair and he said they were contemplating regulations, since I had 20 years with theCity they were interested inthe benefit of my experience and we had a conversation bout hair.

That's the only time I discussed hair on a normal basis.

Q Do you feel that hair interferes with the effectiveness of a fireman?

A No.

Q Do you feel the beard interferes with the seal of the mask?

A No.

MR. WEXLER: That's all.

THE COURT: Are you part of the team that initiated the regulations issued by Commissioner

O'Hagan?

THE WITNESS: I was consulted by Chief Wallace which was four years ago.

THE COURT: At that time did you make a written report or oral report?

THE WITNESS: Oral report.

I was at headquarters for other business and I was called in because of the way I looked.

THE COURT: You mean you had a beard?

THE WITNESS: Yes, and long hair.

THE COURT: Were you a lieutenant or captain?

THE WITNESS: I was a captain.

THE COURT: At the time you were questioned as far as that, it didn't encompass the question of masks or safety of your particular person as a fire-fighter?

THE WITNESS: It was very broad. It covered many, many aspects. Chief Wallace introduced the discussion by saying he was just interested in information and the benefit of my experience with hair and he mentioned masks.

THE COURT: What did he say?

THE WITNESS: He specifically said he wasn't taking any steps.

THE COURT: Was there any indication that any

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steps would be taken?

THE WITNESS: He said they were interested in developing hair regulations and at that point they were gathering information.

THE COURT: At the time you had the interview with these people, Chief Wallace, did you get any impression whatsoever that possibly it was because of the hair and beard rather than the sealing of the mask or some other problem that may occur by reason of fire fighting?

THE WITNESS: You want my impression.

THE COURT: Not your impression, what was the conversation?

THE WITNESS: He discussed many aspects of hair whether or not it was military looking, whetner it gave the right image of the Fire Department, whether it was clean, healthy?

THE COURT: Did you find that type of discussion secondary rather than primary?

THE WITNESS: I was pretty hung up about people hasseling me about my hair.

THE COURT: It can be a hangup.

THE WITNESS: Yes.

THE COURT: Forgetting the hangup, nothing was

said to you about your hair?

THE WITNESS: Not until January of 1972.

THE COURT: WHat happened in '72?

THE WITNESS: I was ordered to attend a funeral of Lt. Connolly in Springfield Gardens --

THE COURT: The lieutenant killed in a fire?

THE WITNESS: Yes.

There were many captains. I was one that was there because I was on duty. As such I was in charge of a large platoon of men and I stood out in front and I was either observed by the Chief of the Department O'Hagan at the funeral or it was on television.

A few days later the Assistant Chief who was in charge of my division, that is, he had supervising duties over my commander, came to see my commander.

We had a long discussion at which time I agreed to cut my hair and I put it in writing that they ordered me to cut my hair for safety purposes, remove my beard and cut my hair.

I did that because I was ordered to do it. I didn't want to interfere with my mission as a co-commander.

THE COURT: They told you it was for safety reasons?

THE WITNESS: Yes.

THE COURT: Who was the Commissioner then?

THE WITNESS: Robert O'Lary.

CROSS-EXAMINATION

BY MS. CARROLL:

Q I'd like to ask you with respect to your statement that you don't believe that face hair including a beard has any effect on the operation of a mask, have you ever had any scientific experience in actually testing leakage and seepage of masks?

A No.

MS. CARROLL: That's all.

THE COURT: Do you take part in the Saturday morning testing of the masks?

THE WITNESS: Yes.

THE COURT: Now, you have shaved your beard and placed your hair in the regulation area, so to speak, do you find any difference in the setting of your mask?

THE WITNESS: No.

THE COURT: Have you found it feels or seals tighter or does it seal the same way?

THE WITNESS: It feels a little differently -- no.

THE COURT: Do you find any feeling that it is more secure under the circumstances without a beard?

THE WITNESS: No.

THE COURT: Does it feel the same now as you did with the beard?

THE WITNESS: As I said, it is a little different.

THE COURT: This mask which I will see, I hope, does it cover the outer perimeter of your jaw?

THE WITNESS: Just where you are touching.

MS. CARROLL: Rather than being conjectural, we can have the demonstration now.

THE COURT: Can we do that now?

MS. CARROLL: Certainly.

THE COURT: Will the captain put it on so I can have a fairly good idea.

(At this time the Captain proceeded to don the mask.)

THE COURT: Can you hear me?

We will get his answer later.

When you placed that mask on your head, you are the one that controls the adjustment?

THE WITNESS: Yes.

THE COURT: You control the fitness of it, in other words, the tightness of it as it contacts your

face?

THE WITNESS: I think whoever made it has something to do with that because the shape of your head has a lot to do with it.

THE COURT: That mask there, is it made in such a manner and I assume you are familiar with it having been with the Fire Department for many years, is it made in such a manner that it will fit the contour -- I will rephrase the question.

Have you ever known anyone who placed that mask on their face regardless of beard or otherwise, it didn't fit the contours of their face?

THE WITNESS: Only by hearsay.

THE COURT: In your command you have never had that experience?

THE WITNESS: No.

THE COURT: Have you ever had anyone in your command without a beard who has complained that the mask has a leaking effect or the6 had a sensation it might be leaking or would leak?

THE WITNESS: I can't recall. It is possible that it did occur.

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Mahnken-cross

THE COURT: How many men do you have in your company?

THE WITNESS: 28 men under me.

THE COURT: How many of these men have either hair beyond the regulation you are speaking about now and also beards or goatees or mustaches beyond the regulation that we are speaking about now?

THE WITNESS: Well, the regulation in my opinion is so stringent --

THE COURT: I am not going to take your opinion as to that, that is for me. I do not want you to usurp my job.

I will ask you the questions. I want to know how many men in your company is the hair touching the collar, and secondly, as to beards around the face, and I assume the beard would run from sideburn to sideburn covering the chin and a mustache, covering the outer rim of the upper lip. What I am looking for in your company, how many men had this fashion feature and condition of hair?

THE WITNESS: I did not take a count, but I would say more than half of them had to go to the barber.

THE COURT: Of more than half that had to go

to the barber, was there any one of them on a testing Saturday morning, that ever complained to you that their mask was not fitted properly because of their beard or hair?

THE WITNESS: No.

THE COURT: How about the case of the goatee?

THE WITNESS: No.

THE COURT: When you place that mask on your face and you have a goatee with hair, does that, in any way, cause an impediment or breathing situation as far as your mouth is concerned?

THE WITNESS: Not to my experience.

THE COURT: Did you have a goatee?

THE WITNESS: I had a full beard, a very large beard.

THE COURT: Did it make you uncomfortable however, so uncomfortable, assuming you were placed in a position or condition there was such strain and such an unbearable situation of either heat or fire because of the proximity of those two things, that this hair on your face, together with this mask pressing against the hair and the face itself, would make it so uncomfortable, you might want to take it off?

Mahnken-cross

THE WITNESS: I think being in proximity to heat and fire is uncomfortable.

THE COURT: No question about it. That is part of your job just like it is part of my job to make very difficult decisions.

THE WITNESS: I would say that the constricting effect of the mask on a large beard, does cause some--

THE COURT: Inconvenience?

THE WITNESS: Yes, to a minor degree.

THE COURT: But would the inconvenience, in your opinion, Captain, be such that it might make a man, a reasonable man who would not panic under just ordinary circumstances, say of an ordinary type of fire, of a fire of a fairly good consistency and weight and heat and real unfriendliness, and you go into this fire with these impediments as the regulations now claim they are, would that cause him to panic to the extent he might decide with all these things closing in on him, that he would rip off his mask so it may cause him danger?

THE WITNESS: I cannot imagine it would.

THE COURT: You cannot imagine?

THE WITNESS: No. Panic is caused by the feeling you cannot get out, you cannot escape.

Mahnken-cross

THE COURT: Wouldn't the mask give you that feeling, if you have these additional items on your face?

THE WITNESS: I would say the use of the mask is a claustrophobic event.

THE COURT: That alone. If you had a lot of other items as you have spoken about, which the regulations speak about, would that, do you think, or might that, cause an additional cause for panic under the circumstances of such stress or very strenuous conditions?

THE WITNESS: I do not think so.

THE COURT: Well, of course, you might be a little more adapted to unfriendly fires as I am, so maybe your attitude might be different than mine.

MR. WEXLER: No further questions.

Your Honor, at this time we would like to agree to the stipulation that I will not call any more who will give the same testimony concerning beards, not conceding the truth of it, but I would have 14 more.

THE COURT: I would like to do one other thing.

MS. CARROLL: We have two other things.

THE COURT: Do not object. Just do me one

favor, do not object, and don't you object. I would like to do one thing. I would like to see this mask on that gentleman who testified. I want him to place it on his face. Would you give your name for the record, please?

MR. ANASTASO: Joseph Anastaso.

THE COURT: You previously were sworn.

MR. WEXLER: Can we have the same mask? Why are you changing it?

COMMISSIONER MENDES: I am not changing anything. We have been talking about multi-unit drills. Let us show what they have been doing at multi-unit drills.

THE COURT: You do not know how important it is at this point. I want to see what this mask does with this man's face. With this hair on his head. I am a firm believer in demonstrative evidence. You can demonstrate it. Show it to me.

THE WITNESS ANASTASO: Do you want the face piece?

THE COURT: That is all. The length of your hair really does not bother me. I want you to pull that as tight as you can so it will be sealed, of course. I do not want you to choke yourself to

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Anastaso

death.

(The witness put on the mask.)

THE COURT: All right, take it off.

Now, does any part of that mas push any part of those hairs on your beard upward to your mouth?

WITNESS ANASTASO: No.

THE COURT: How about the part when you tested it for the purpose of seeing whether it was sealed properly, did it pull any part of your upper lip down into your mouth?

THE WITNESS ANASTASO: You have pressure on your cheeks.

THE COURT: Did that cause any constriction as far as breathing was concerned?

THE WITNESS ANASTASO: No, sir.

THE COURT: It did not.

THE WITNESS ANASTASO: No, sir.

MS. CARROLL: We would like to do the same test on Mr. Epstein, done by Chief Mendes.

THE COURT: Do whatever you want.

(Mr. Epstein put on the mask.)

COMMISSIONER MENDES: Mr. Epstein does not have any experience other than in the interim while we were waiting.

Epstein

THE COURT: I can see the way he puts it on he has no experience. I will state for the record it is absolutely recognizable he does not.

COMMISSIONER MENDES: He has long hair, and this is the way that Anastaso put it on and the way that he put it on.

Mr. Epstein is going to adjust the spiders.

THE COURT: He is doing it wrong, that is the problem. You are the safety officer, and if he is doing it wrong, you should tell me. I know he is doing it wrong myself.

COMMISSIONER MENDES: When we have the beginners in training, and they go over to the school, and they get into the smoke room, they are ignorant about it. Mr. Anastaso has been four years in the company and he says that the spiders did not tangle in his hair, but actually they do.

THE COURT: Let us assume the spiders tangle in the hair. What does that cause?

COMMISSIONER MENDES: Delay in putting on the mask.

THE COURT: Wouldn't that be rather in taking it off?

COMMISSIONER MENDES: One of the problems

is getting men to wear these Skott Air Packs in tenements. One of the problems they raise is that when you try to save a life, you cannot take time to put on the Skott Air Pack and that is true and we are lenient where life is in danger and then you have to do what you can and that is one of the reasons we have smoke injuries and breathing injuries when the men are aggressive and they move in.

THE COURT: Tell him he can remove it.

(continued next page.)

COMMISSIONER MENDES; If he can finish one thing before that. This is where it connects into the man type regulator. By holding it here, the men have presented and represented the test of the seal that is on a multi-unit and they know it is right when they pull in the face piece.

Is the face piece pulled in?

MR. EPSTEIN: Yes.

COMMISSIONER MENDES: So it is good. He thinks it is good, but anybody can depress a face piece. Now is it depressed?

MR. EPSTEIN: Yes.

COMMISSIONER MENDES: Which would indicate the effect of sucking in of that face piece, the men have said, assures him everything is okay and therefore, the beards we wear with the face piece on after the test we take with the equipment the fire department has given us, has assured us we are safe in there, so we should have our beards.

But we are representing here, is that the test we give the men is the best of a bad world. We know the mask is not perfect. We know that every individual has a different contour. We know he talks in a fire, he works in a fire and the jaw muscles

Epstein

work, and whatever openings are here are aggravated are extenuated and increased by any obstructions you put between the mask and skin and we represent that hair is an unnecessary obstruction here. Nobody in this room has presented up there in a scientific way, when they talk about seals, that the seals they are talking about is perfect.

MR. WEXLER: Is this a summation?

COMMISSIONER MENDES: No, I am showing this point.

THE COURT: He is discussing the matter with me.

MR. WEXLER: I do not want to listen, Judge.

THE COURT: Your ears are quite receptive, you are standing and listening.

MR. WEXLER: I am amazed. This guy does not have a beard and you say it doesn't work.

COMMISSIONER MENDES: He has long hair and sideburns and if you look over here, I will stick this between the face piece.

MR. WEXLER: I am sure I can push that underneath where there is no beard.

THE COURT : You missed an additional point. It is the question of time that goes into the fitting

of the mask. 'If every fellow has to go into a room with contoured mirrors to find out if the face mask is making him look good and fits well and hair is in the right place, he has troubles while the building burns down and fires would never be put out.

MR. WEXLER: I think this is an afterthought that came up with the presenting of their case, because no one has had trouble.

THE COURT: Everything done before me is never an afterthought, it is always a matter of proof.

MR. WEXLER: I do not think any of them had any problems with putting it on.

THE COURT: I am the one who wanted to see the mask.

Is there anything further?

MS. CARROLL: Yes, we would like to call Michael Birmingham.

THE COURT: Is that your last witness?

MS. CARROLL: We would like to call Commissioner Mendes as a windup witness and I believe it will be very brief.

THE COURT: That would not be necessary.

Birmingham

MICHAEL BIRMINGHAM, called as a witness, having first been duly sworn by the Clerk of the Court, took the witness stand and testified as follows:

DIRECT EXAMINATION

BY MS. CARROLL:

Q Mr. Birmingham, are you presently employed with the Fire Department?

A Yes.

Q How long have you been with the Fire Department?

A A little over 5 years.

Q What company do you work for?

A Ladder 123.

Q Have you ever worn a beard while a fireman?

A Excuse me?

Q Have you ever worn a beard while you have been a fireman?

A Yes.

Q How long ago was that?

A Somewhere from 2 years to about 4 years ago.

MR. WEXLER: I am sorry I cannot hear you.

A About 2 years, between 2 and 4 years ago.

Q Were you ever involved in fighting a fire while

wearing that beard?

A Yes.

Q And did anything occur, an incident, to the wearing of that beard?

A Yes. At one time my hair singed while I had a fire extinguisher and I walked into the room and I stood up for a brief second to get a better shot at the fire and as I stood up the heat was so intense it just singed my beard and the back of my hair.

Q You were not wearing a mustache at the time?

A No, I was not.

Q Did you have any burns on the exposed part of your face, your cheeks or neck, anything like that?

A No, nothing at all, just on the hair itself.

Q Was it reddened, the exposed areas of your face?

A No.

Q In other words, the hair ignited immediately, but the rest of your face did not in any way burn?

MR. WEXLER: I am sorry, he did not testify to that.

THE COURT: He did not say anything about ignited. Singed and ignition are two different things.

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Birmingham-direct

Q Did your hair singe?

A Yes.

Q But your face did not burn?

A No, there was nothing.

THE COURT: Are you in a fire fighting unit?

THE WITNESS: Not at the moment. I am presently working light duty downtown Brooklyn.

THE COURT: Are you going back to a fire fighting unit?

THE WITNESS: In about a month, I guess.

Q When you were wearing a beard and using the mask device, did your use of the device, in any manner, differ from your regular use of the mask?

A Yes. I used to open the emergency valve to get a constant flow of air whereas you are supposed to use it like a breathing type apparatus.

Q Why did you have to do that?

A Because in my case, my beard was so thick or wiry, I do not know what it was, but I could not get a seal on myself.

Q And do you know of any other fireman with that --

A It did not really impair that much, like in breathing. I mean actually no smoke got in there at all.

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Just when I breathed, I got a constant flow.

Q You felt the need to in fact, release the emergency flow because of the presence of your beard?

A Yes.

THE COURT: Did you feel that as a constriction, is that what it was?

THE WITNESS: A constriction?

THE COURT: Yes.

THE WITNESS: Yes, I guess so, in a way.

Q Can you tell us, did firemen without beards -from your experience, have to use this procedure of opening up the emergency amount of air?

A No.

Q From your experience, can you envision a situation whereby having used this emergency device, you would have cut down your time and that would have had a detrimental effect on you?

A If I got caught somewhere, I could not get out, but that didn't happen to me at all.

Q What do you mean caught somewhere?

A If I was pinned someplace, to a point where I could not move at all, and then it would be bad, but I never had a situation like that.

Q If you were on the sixth floor of a burning

building and the fifth floor collapsed and your escape time was thereby cut short, the fact that you had used up a good deal of your air by releasing the emergency valve might be a very serious factor, would it not?

A In an emergency case like that, yes.

MS. CARROLL: I have no further questions.

(continued next page.)

CROSS EXAMINATION

BY MR. WEXLER:

Q You say your hair was singed. Where did the fire come from, from the back or front?

A Was just the heat in the room was so intense, there was no flame, it was just, you know, very warm, very hot.

Q How much singeing was there, do you know?

A Maybe a half an inch on the end of the hairs. I did not burn my skin at all.

Q Did you have any other singeing?

A No, that is all. It was just gray-like around here and on my beard, my mustache and eyelashes, but nothing burned at all, no burns on my face or anything.

Q Did you go to a hospital or doctor?

A No, nothing. I did not take off work or anything.

Q You did not make a report, you did not consider it as anything?

A I did not realize it happened until I got back to the firehouse.

Q But your hair did not go up in flames or anything like that?

A No.

Q Nothing burned, you had a singe?

A Yes.

Q Did you or did you not, get a seal with your beard?

A I, myself, could not get a seal.

Q You went into fires without reporting it?

A It was reported and that is one of the reasons I shaved it off.

Q You could not get a seal, in other words?

A Right. I, myself, couldn't.

Q Did they give you a special mask?

A No, The only way to get the seal would be to take off the hair so I removed the beard.

Q Were you ever tested in Welfare Island?

A No, never.

Q So you could not get a seal and you reported it and you had to shave?

A Right.

Q How long did you go with the beard?

A Two years I would say.

Q For two years you could not get a seal?

A Right.

Q Do you know when you can't get a seal?

A Yes, I can feel it.

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Birmingham-cross

Q You generally know, right?

A Yes.

Q In other words, with the multi-unit test, you know you are not getting a true seal?

A Right.

Q When you go into a fire, you know you are not getting a true seal so you knew you were not getting a true seal?

A Right.

Q Did you see other fellows who had beards who had true seals?

A Yes. I don't know, but my beard I could not, but I have seen lots that could get it.

Q But you say as an individual fireman, you know when you have a seal, and you know when you do not, isn't that right?

A Right.

MR. WEXLER: No further questions.

MS. CARROLL: We have nothing further of this witness.

I would like to call Chief Mendes for final questions.

Mendes

C H I E F M E N D E S , resumed the witness stand and testified further as follows:

THE COURT: You have been sworn, Commissioner Mendes.

DIRECT EXAMINATION

BY MS. CARROLL:

Q Chief Mendes, you previously heard the testimony of Mr. Moran concerning his outfit when he goes to fires. Would you comment on his assertion that during the course of an entire fire he maintains his coat on with the collar up and flaps down?

MR. WEXLER: I do not think he said that.

THE COURT: I think he said he kept up the collar of his coat, he kept up the collar of his coat and it was buttoned, but only in the winter he had the flaps down. Nobody is going to go around in the summertime with his ears covered. It is bad enough sweating, without sweating with your ears.

Q Absent the ear flaps, would you comment on that assertion that during the entire fire he maintains his coat on with his collar up to protect and keep the hair down. Would you comment on that?

A Well, that would be somewhat in dispute. In the book of rules, it is very clear, because we have had

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Mendes-direct

heat exhaustion and prostration injuries because fire clothing is very heavy and you are carrying something like 60 pounds in fire equipment including masks and everything else, and the men become worn out quickly.

The chiefs are allowed over a long haul in a stage of the fire, to remove the rubber coats and the like, in order to let men breath and work better and in order not to become exhausted.

Q Would you say fireman Moran's mode of attire is usual to firefighters, the one he described?

A I have been in the Fire Department for 28 years. I have worked in every single borough in the City of New York and on the busiest trucks and engines and I have worked in Staten Island too.

THE COURT: They used to send firemen to Staten Island in the old days as punishment.

THE WITNESS: I know they did, but I was good and it killed me because I had to make that trip.

In any case, for 28 years, I have never seen anybody turn out like Fireman Moran demonstrated here, tucking a pigtail under their clothing and putting their coat collar up and the ear flaps down.

THE COURT: He was asked to put them down.

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Mendes-direct

THE WITNESS: He was asked to put them down? In other words he would not put them down except in the winter time.

THE COURT: That is correct. That is what he said.

THE WITNESS: I know of very few firemen except in the outlying areas with long runs on very cold nights and workers in the night, that would even put the earmuffs down. Generally, what you do if it is a very cold night and you are pulling on a hook or pulling a hose or stuck out in a building 5 hours and it is 5 below zero, you get your earmuffs, and if you work in Rockaway, then you put the earmuffs down. But you don't put down earmuffs just routinely on a company doing 20 runs a night.

MR. WEXLER: Objection, he did not say he does it routinely.

THE WITNESS: I was asked a question. Is this the way a fireman looks?

THE COURT: Is there another question you want to ask?

Q Would you say this would affect his ability as a firefighter being attired that way?

A Well certainly, if he was going to work in a fire, and I presume that he does not keep the earmuffs down in the summertime or in a hot, heated building in the wintertime, in a fire building -- is that the presumption we are to make -- that he does not use his earmuffs in a hot building in the wintertime, but he wears them outside the hot building in the wintertime? I really do not know what the earmuff deal is, except to screen the hair and show us how safe --

THE COURT: If you do not know, you cannot expect this Court to know.

THE WITNESS: In a way, I have never seen anybody attired as Fireman Moran was attired in precisely that way, or anybody take such care in attiring himself. When you get out, you throw the stuff on. A lot of men throw coats on and hang on to the strap on back.

THE COURT: It would have made a good T.V. advertisement.

THE WITNESS: I guess it would be terrific.

Q You heard the testimony given in this case. Can you tell us, to your knowledge, has the Fire Department, at any time, maintained or stated that the Saturday test procedure that has been demonstrated by the plaintiffs here,

effects an optimum seal.

THE COURT: I think he answered the question.

THE WITNESS: I think we answered. Optimum -- I think this is the best practical test we have devised.

THE COURT: That is what he said yesterday.

THE WITNESS: That is what I tried to demonstrate here. There is no guarantee, no matter who is performing and putting their face piece on, and effecting this inhalation seal, there is no guarantee at all that he is immune to the environment. In fact, we know he is not. They do not no matter what they say, they cannot tell whether or not they are.

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Mendes-direct

Q As an expert firefighter, do you conclude that the presence of long hair increases the hazards in fire fighting?

A Without question, no doubt about it.

Q Why is that?

A It is flammable.

THE COURT: No question about it. There is no question, I never disputed any case where hair is flammable. Women's hair is flammable, children's hair is flammable, a fireman's hair is flammable, a lawyer's hair is flammable, everybody's hair is flammable. That is not the problem. We are talking about long hair being unsafe to a fireman. Isn't that what we are discussing?

THE WITNESS: In job related circumstances, under the conditions which they work, they cannot be considered ordinary citizens doing their business under safe atmosphere and safe conditions.

THE COURT: As you recall, the Commissioner said yesterday, it does not apply to everybody that works in the Fire Department, it applies to fire fighting individuals.

THE WITNESS: Only fire fighters.

MS. CARROLL: That is all.

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CROSS EXAMINATION

BY MR. WEXLER:

Q You did some checking in the last few days, calling hospitals, calling departments, calling individuals?

A I did not call a single hospital, but I had somebody call.

Q You had people call, Chief, you did a job?

A No, not really. What we were trying to do --

Q Trying to prove your case?

A The Fire Department established three burn centers, three, four or five, very recently, very minimumly manned. They are skin expert doctors, but they are not our doctors, and I tried to contact them.

Q With all your checking, having other people check for you, have you found any case where long hair an incident?

A If I recall, Birmingham was just on the stand.

Q Is that the only case?

A That is one. Dr. Sealy testified the case of a man with the hair destroyed, the hair follicles.

Q He said he did not know of any. I want to know where long hair caused an incident, other than Birmingham said he had a limited singeing and it did not bother him and did not mean anything, do you know of any

with all your checking?

A Personally, no. I can't think of any right now, but you are asking for a total recall of 28 years, --

Q Come on, you have been thinking for two days and having people call.

A I have been thinking of a million other things with masks and everything else.

THE COURT: I will say this: I can have a very, very grave question as to masks and beards, but it always comes down to long hair, whether long hair causes any problem with anyone. The more I look around, the more I read, the more cases I read about and the more magazine articles I read about, and the more people that talk about it, the only objection it seems to be is a grooming objection. The average citizen that objects to it equates it with something so terrible and so bad that how could you possibly have it. I am sure I would not have you equate it that way.

THE WITNESS: By no means, your Honor.

THE COURT: I have yet -- and this is for the record -- I have yet to have had, in all the experts that have come before me on this witness stand involving long hair, and I can consider myself an expert judge on

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Mendes-cross

it now, I have yet to have one come in and say, "Yes, I know one case of long hair where it really caused a little bit of damage."

THE WITNESS: Here is a precise incident. I have played golf for 27 years, and I have never been struck with lightening, and yet, in the middle of a electrical storm, despite the fact of never having been struck by lightening, never having seen anyone struck by lightening, and have only read about it, but knowing about this natural phenomenon, that takes place, I am still not fool enough to stand under a tree with wet clothing holding the steel golf clubs in my hand in an electrical storm.

THE COURT: How about the little girl last week? She had nothing in her hand and lightening struck a tree and she got killed. You cannot quite equate that.

THE WITNESS: We are trying to remove the occasion of accident.

THE COURT: You see, Chief, we are talking about the experience of safety hazards as applied to the conditions of the people as we know them, not of something that either the Good Lord, by some unfortunate circumstances causes upon us, but

something that we create ourselves, hair growing, which He gave to us, I do not think anybody in the world would question the Good Lord put the hair on our heads and we cannot deny it. The question is, is it a hazard in any particular job, that is what we are trying to find out.

The masks I have no problems with, none whatsoever. But the hair, somehow or other, everyone said to the collar, and I am trying to find out what is the difference, just to the collar or two or three inches beneath the collar?

THE WITNESS: In the case of Fireman Moran, for instance --

THE COURT: Forget Fireman Moran.

Let us assume the regulation says two inches beneath the collar. Do you think it would be more hazardous two inches beneath the collar than just over the collar?

THE WITNESS: Yes, I think so.

THE COURT: Tell me why? Put the hat on, let the Chief put the hat on.

THE WITNESS: The more hair there is to burn, the more opportunities embers have to fall.

THE COURT: You do not walk into a fire with

your head like this and say, here I come. Be practical about it. We are practical people. We don't do that.

I want you to put on the helmet. Would you turn around and stand up straight?

(The witness put on the fire helmet and stepped down and turned around.)

THE COURT: If I told you your hair extends beneath the apron of that hat, would you believe me?

THEWITNESS: Sure.

THE COURT: And it does not touch your collar you know.

THE WITNESS: No.

THE COURT: As a matter of fact, it is about a half inch above your collar and two inches beneath your hat.

I will take the first witness that we had. Do you mind looking at him with his hair? Would you come over and put that hat on?

(Witness Kamerling placed the firehat on his head.)

THE COURT: As a practical matter, being practical about the whole thing, do you know his hair extends no further than yours and he,

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Mendes-cross

presumably looks like he has longer hair.

THE WITNESS: He is a fire fighter and I am an administrative man.

Is the point that the order is restrictive for hair?

THE COURT: I am just saying is it arbitrary.

THE WITNESS: It does not seem excessive to me.

THE COURT: I want to ask you a question.

Is it arbitrary to say to the collar or not, in your opinion?

THE WITNESS: Well, I think in my opinion, the collar is something defined and at least it is a landmark we can measure from and perhaps that is why it is in there.

THE COURT: Would your opinion be any different instead of the man having it beneath his collar, but he decides to bush it out in the back of his head? I am not talking about an Afro now, I am talking about bushing it out. Would your opinion be any different now or would you say he has to have it changed.

THE WITNESS: I think so, your Honor.

THE COURT: Would you make another regulation?

THE WITNESS: No.

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Mendes-cross

THE COURT: Would that have anything to do with fire?

THE WITNESS: Yes. While the man has his helmet on he has protection over whatever hair he has on the top of his head. There is no guarantees as one of your own witnesses teestified.

THE COURT: I have no witnesses. He has witnesses.

MR. WEXLER: I do not want to listen to this.

THE WITNESS: The plaintiff at the Commodore fire and the Davega store, his helmet fell off and that is a condition of work in the fire department.

THE COURT: This portion of the conversation between yourself and myself is merely a dissertation on that balance of the case, and has nothing to do with the rest of it.

I merely wanted to satisfy myself and that is all.

MS. CARROLL: Your Honor, with respect to your question as to whether it ever happened to anybody, it happened and does happen as in Wasluski. The fact we do not have a charred head here does not eliminate the possibility or probability that it occurs.

THE COURT: Even in Wasluski, in the County of Hempstead, Fire Department, it really does not tell how his hair was burned. I am almost certain, if we obtain the affidavits in that case, we might have some revelations involved. That is in Nassau County, Judge Durinian, whom I happen to know, is a very fine Judge, there is no question about it.

It may have been a little more than what we are talking about here. I am familiar with the case.

Does everyone rest?

MR. WEXLER: Yes, your Honor.

MS. CARROLL: Yes, your Honor.

THE COURT: The Court will have its opinion. I am going inside and in about 15 or 20 minutes, if you wait, I will dictate it into the record.

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THE COURT: The Court is ready to read its decision into the record in Kamerling versus O'Hagan.

Plaintiffs here seek to enjoin the enforcement of the newly promulgated hair regulation of the New York City Fire Department alleging that it infringes upon the constitutional rights of the firemen. They maintain that the length of hair and the existence of facial hair on firemen should be of no concern to the Fire Department and that regulation of grooming standards is a violation of firemens' First and Fourteenth Amendment rights.

After a hearing on plaintiffs' application for a preliminary injunction, the Court makes the following finds of fact and conclusions of law:

The test to be applied in this area has recently been enunciated by the Second Circuit in Owen v. Barry, 483 F. 2d 1126. There the Court held that any restriction on an individual's choice of personal appearance must be justified by a legitimate state interest reasonable related to the regulation.

Because of the particular dangers that firemen are called upon to face, including flames, burning debris, noxious and superheated gases, regulations to protect the safety of firemen are, of course,

required. If the restrictions are reasonable, they can be justified by the legitimate state interest in protecting the safety of firemen.

The evidence before the Court, including a demonstration of several men putting on the gas mask with different amounts of facial hair and hair lengths, while conflicting to some degree, supports defendant's point of view that hair longer than the regulation permits and mustaches and beards may increase the dangers that firemen face. Hair that extends below the helmet may catch fire. Facial hair extending to the outer rim of the gas mask may interfere with the seal required for effective use of the gas masks that firemen in New York use. The greater the leakage into the mask, the greater the risk that the firemen will be disabled.

In addition to endangering his own life, an injured fireman can endanger the safety of other firemen and, indeed, the effectiveness of the Fire Department in extinguishing any particular fire with a minimum of loss. Any reasonable measure that reduces the risks to firemen is therefore, in the public interest and is constitutionally permissible.

Since it has been shown to the satisfaction of

the Court that hair longer than the regulation allows, or facial hair that the regulation prohibits, appears to be a safety hazard, the Court holds that the regulation is a valid exercise of state power and is not an unreasonable interference with the firemens' constitutional rights. Any general prohibitions that the regulation contain are a natural outgrowth of the practical aspects of enforcing the regulation and are also reasonable under the circumstances.

It is significant that the regulation here at issue applies only to active fire fighters, making clear that grooming for disciplinary or other reasons is not being regulated and safety is the primary motivation for the regulation.

Accordingly, plaintiffs' application for a preliminary injunction is denied and the complaint is dismissed. Defendant is ordered, however, to allow 10 days for compliance with its regulation before any disciplinary procedures are instituted.

* * * *

DECISION AND JUDGMENT OF THE
HON. MARK A. COSTANTINO
DISMISSING COMPLAINT

Plaintiffs here seek to enjoin the enforcement of the newly promulgated hair regulation of the New York City Fire Department alleging that it infringes upon the constitutional rights of the firemen. They maintain that the length of hair and the existence of facial hair on firemen should be of no concern to the Fire Department and that regulation of grooming standards is a violation of firemens' First and Fourteenth Amendment rights. After a hearing on plaintiffs' application for a preliminary injunction, the court makes the following findings of fact and conclusions of law.

The test to be applied in this area has recently been enunciated by the Second Circuit in Dwen v. Barry, 483 F.2d 1126. There the court held that any restriction on an individual's choice of personal appearance must be justified by a legitimate state interest reasonably related to the regulation.

Because of the particular dangers that firemen are called upon to face, including flames, burning debris, noxious and superheated gases, regulations to protect the safety of firemen are, of course, required. If the restrictions are reasonable,

they can be justified by the legitimate state interest in protecting the safety of firemen.

The evidence before the court, including a demonstration of several men putting on the gas mask with different amounts of facial hair and hair lengths, while conflicting to some degree, supports defendant's point of view that hair longer than the regulation permits and mustaches and beards may increase the dangers that firemen face. Hair that extends below the helmet may catch fire. Facial hair extending to the outer rim of the gas mask may interfere with the seal required for effective use of the gas masks that firemen in New York use. The greater the leakage into the mask the greater the risk that the firemen will be disabled. In addition to endangering his own life, an injured fireman can endanger the safety of other firemen and, indeed, the effectiveness of the Fire Department in extinguishing any particular fire with a minimum of loss. Any reasonable measure that reduces the risks to firemen is therefore in the public interest and is constitutionally permissible.

Since it has been shown to the satisfaction of the court that hair longer than the regulation

allows, or facial hair that the regulation prohibits, appears to be a safety hazard, the court holds that the regulation is a valid exercise of state power and is not an unreasonable interference with the firemens' constitutional rights. Any general prohibitions that the regulation contain are a natural outgrowth of the practical aspects of enforcing the regulation and are also reasonable under the circumstances.

It is significant that the regulation here at issue applies only to active fire fighters, making clear that grooming for disciplinary or other reasons is not being regulated and safety is the primary motivation for the regulation.

Accordingly, plaintiffs' application for a preliminary injunction is denied and the complaint is dismissed. Defendant is ordered, however, to allow five days for compliance with its regulation before any disciplinary procedures are instituted.

NOTICE OF APPEAL

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

NEIL KAMERLING, RICHARD CONTELLO, EDWARD MORAN, JAMES J. SEABARKROB, and JOSEPH J. ANASTASIO,

Plaintiffs-Appellants,

-against-

JOHN T. O'HAGAN, Fire Commissioner, City of New York,

Defendant-Respondent.

S I R S:

NOTICE IS HEREBY GIVEN that the plaintiffs, NEIL KAMERLING, RICHARD CONTELLO, EDWARD MORAN, JAMES J. SEABARKROB and JOSEPH J. ANASTASIO hereby appeal to the United States Court of Appeals for the Second Circuit from the Memorandum and Judgment of the Hon. Mark A. Costantino entered in the Office of the Clerk of the United States District Court, Eastern District of New York on the 30th day of July, 1974 which said Memorandum and Judgment denied the plaintiffs application for a preliminary injunction and dismissed

NOTICE OF APPEAL

Dated: Smithtown, New York
August 14th, 1974.

Yours, etc.

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